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John Bud 26216
9 Somers Place
Roxton Square

MEDICA SACRA;

OR,

SHORT EXPOSITIONS

OF THE MORE IMPORTANT DISEASES MENTIONED
IN THE SACRED WRITINGS.

BY

THOMAS SHAPTER, M.D.

PHYSICIAN TO THE EXETER DISPENSARY AND LYING-IN CHARITY,
MEMBER OF THE ROYAL MEDICAL SOCIETY OF EDINBURGH, &c.

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John Bird
from I. Hapster

TO
JOHN BLACKALL, ESQ. M. D.

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS,

SENIOR PHYSICIAN

TO THE

DEVON AND EXETER HOSPITAL,
LUNATIC ASYLUM, &c. &c.

THE FOLLOWING PAGES

ARE INSCRIBED,

AS A TESTIMONY OF RESPECT, AND ADMIRATION OF
THOSE HIGH TALENTS AND ACQUIREMENTS,
WHICH HAVE JUSTLY RAISED HIM TO
PROFESSIONAL PRE-EMINENCE IN
THE WEST OF ENGLAND,

AND

AS AN ACKNOWLEDGMENT OF THE MANY FAVORS
HE HAS CONFERRED ON HIS OBLIGED
AND GRATEFUL FRIEND,

THE AUTHOR.

PREFACE.

IN the following little work, an endeavour has been made to investigate and illustrate the nature of some of the diseases mentioned in the HOLY SCRIPTURES:—the inquiry was first undertaken as a matter of private amusement; in the course of pursuing it, however, so much more gratification was derived than had been anticipated, that I am induced to suppose others might participate in the feeling.

I would distinctly disclaim any pretensions to style; I have aimed solely at clearness of expression; but yet have to regret that the nature of the investigation has occasionally entailed the necessity of introducing languages with which it can

scarcely be expected every general reader is acquainted.

Perhaps some may say, that whilst there exists a work under the same title as this small production of mine, with the important prefix of Dr. Mead's highly and justly esteemed name, another was superfluous: sufficient apology, however, on this score may be offered; for independently of my dissent from many of the views of Dr. Mead on the diseases under discussion, it must be borne in mind, that the *Medica Sacra* of this learned physician was published in Latin, and that its preface contains the following anathema against those sufficiently bold to translate it.

“*Bεβηλοις* autem hæc non scripsi; sed iis tantum, qui aut sacris theologicis, aut medicis, initiati sint et eruditi. Eaque de causâ Latino potissimum sermone in lucem edere placuit; quem per multa jam sæcula docti homines ad ea inter se communicanda, quæ aut nova, aut præter vulgarem opinionem dicta viderentur, ubique fere adhibue-

runt. Si quis igitur libri hujusce Anglicam versionem suscipiat, non tantum, me invito, id se facturum sciat; sed etiam contra jus illud æquabile, quo de re sua, prout libeat, statuere unicuique conceditur."

Whether from these investigations conclusive proof results to the overthrow of that somewhat prevailing notion, that the diseases mentioned in the Sacred Writings are in themselves miraculous, is rather a subject of inquiry for the ministers of our **SACRED RELIGION**, than for the Medical Annotator; though at the same time they must be admitted as evidence, that God has vouchsafed by these means to make a demonstration of His will. By the term miracle, I understand some visible, or otherwise sensible effect, which is contrary to the common laws of nature; therefore, if the truth of these commentaries be admitted, it must equally so, that the Sacred diseases (I must be excused for the use of this term) are not contrary to the laws of nature, as they are, to the present day,

characterised by the same symptoms, and evince the same relations as heretofore.

I cannot conclude this preface without offering my grateful thanks for the kind assistance rendered me by the Rev. Canon Rogers, whose talents and acquirements are so well known, and whose authority, where the Hebrew language is concerned, is so justly admitted.

Nor must I omit to express my best acknowledgments to my townsman, Mr. Ezekiel, for the kind use he has permitted of his valuable library.

Exeter,
Feb. 28, 1834.

MEDICA SACRA.

SCATTERED over the pages of the Sacred writings, are many passages relating to the physical condition of man. Some of them we find expressed in sufficiently plain terms, others so wrapped up in the figurative language of oriental description, that occasionally more than ordinary attention is requisite to understand their true meaning.

We not only find the changes both in mind and body, as influenced by the different periods of life, particularly described,

but also many of those morbid conditions to which the infirmity of human nature renders the body susceptible.

Independently of all religious considerations, the investigation of these matters presents many circumstances of considerable interest, especially as shewing the height to which the knowledge of the phenomena attending the physical changes in man had arrived in early times, and the accuracy with which the various observations, opinions, and remarks relating to them, are recorded.

From infancy to old age, the different conditions of life are beautifully described. The incapabilities of infancy and youth could not be more strongly pointed out to the reasoning and inferential mind of man, than it is in the account rendered to us of the making of the first inhabitant of earth, wherein we are told that the breath of life

is breathed into the nostrils of a matured and perfect man.

Without quoting particular passages, it is quite sufficient to observe, that the helplessness of infancy, the infirmities and passions of youth, the vigour of maturity, and the decline of age, are all graphically and justly considered.

The term LIFE is used in very many senses in the Holy writings: but in the confined meaning, to which the nature of my present inquiry limits it, Life includes that period and state which exist from birth to death, and during which time the ordinary actions of existence are performed.

The blood is called the life of the flesh(¹), and the heart the vessel from which proceed the issues of life,(²) and the bones and flesh are considered as the tenement of these life sources.

(1) Genesis ix. 4, 5. Leviticus xvii. 11. (2) Prov. iv. 23.

These are described as performing their several functions perfectly and well, until that period when “the evil days come, and there is no pleasure in them.”

I shall not enter here into any discussion, whether we are to consider old age as a disease, or not; but sheltering myself under the dictum of the poet,⁽¹⁾ “*Senectus ipsa est morbus,*” proceed to say some few words on the decay of mind and body, as exemplified in the Sacred writings—

“*Inde minutatim vires et robur adulturn
Frangit, et in partem pejorem liquitur ætas:*”

though we find a limit to the duration of life expressed in very direct terms, “The “days of our years are threescore years “and ten, and if by reason of strength “they be fourscore years, yet is their “strength labour and sorrow: for it is soon

(1) Terence.

"cut off, and we fly away:"⁽¹⁾ yet there is no time defined for the coming on of old age. On the contrary, in more than one place does the expression, that "the days of youth are shortened," shew that a premature old age is a part of the will of HIM, to whom a thousand years are but as yesterday when it is past.

"It creeps on," says Smith, in his Pour-tract of old age, "by steps and degrees, as "the shadow upon a dial—some of the "flowers of age blow before othersome; "sometime on one bough, sometime on "another; here one, there one, insensibly; "however, when perfected, you have it "stand in full bloom, as it is to be seen in "the ensuing analysis," which, both from its singularity and bearing on the subject, I transfer to the following page.

(1) Psalm xc. 10.

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AGE IS HERE DESCRIBED.

Generally, v. 1, by way of { Assertion. The evil days come.
 Negation. No pleasure in them.

Internal, v. 2. { Rational. { Principal. The sun shall be darkened.
 Irrational. { Inferior. The light.

Subservient to them both. The stars.

Weakened faculties { Animal, v. 3, ap. { Limbs. { Superior. The keepers of the house shall tremble.
 Pearing in the { Mouth. { Inferior. The strong men shall bow themselves.

{ Eyes. The lookers out of the windows shall be darkened.

External . . Natural, v. 4. { The beginning. The doors shall be shut in the streets, when the

voice of the grinding is low.

Mist, v. 4, latter { Inward and outward, in want of sleep, which binds up both.
 end. Of { He shall rise up at the voice of the bird.
 Vital and natural; the active daughters of music belonging to
 the vital, the passive to the animal.

All the daughters of music shall be brought low.

Particu- larly, in symp- tomsfore- running death.

Simple eminent effects, and most remarkable altera- tions, v. 5, of . . . ,
 The body in respect of parts.

The mind. Fear. { Lesser. He shall be afraid of that which is high.

{ Greater. Fears shall be in the way.

The body in respect of parts. { Excrements. The almond-tree shall flourish.
 { Aliment. { Sperm. or hard. The grasshopper shall be a
 burden.

{ Sang. or tender. Desire shall fail.

Immediately, v. 6. Such as belong to the { Brain, and the parts { Without the skull. The silver cord shall be loosed.
 arising thencefrom. { Within the scull. The golden bowl be broken.
 Heart, and the parts { Importation. The pitcher broken at the fountain.
 arising thencefrom. { Exportation. The wheel broken at the cistern.
 as they relate to

In the energetic and figurative language of the Man of Wisdom, the failings and infirmities of age are touchingly and beautifully traced from their commencement, to that natural consummation when, with Horace, it may be said,

“(Jam te) premet nox, fabulæque manes
“Et domus exilis Plutonia.”

The first indications of age approaching, are the slightest shades of mental deficiencies, those threatenings of obscurity which are as the gloaming preceding the darkness of night :⁽¹⁾ “Remember now thy Creator “in the days of thy youth, while the evil “days come not, nor the years draw nigh “when thou shalt say, I have no pleasure “in them.”⁽²⁾

(1) Ecclesiastes xii. 1.

(2) Lorinus says, that these last words have a much more extensive meaning in the original ;—that they relate to the capability of performing one's ordinary duties or business.

Dr. Mead, who has written a commentary on these verses, in his *Medica Sacra*, observes, that with the mental failings commences the enumeration of the evils of the day, “ while the sun, or the light, or “ the moon, or the stars, be not darkened, nor the clouds return after the “ rain.”

Accordingly, we are not to infer from this that the eyes themselves are dimmed, but that, as wisdom and understanding, in various parts of the Scripture, find their emblems in light and its different sources, so are we here to understand that the qualities of the mind are now becoming obscured.

We are therefore to conclude that the Preacher designates by the sun, light, moon, and stars being darkened, the weakening of the inward powers of the mind ; that the general effects of stricken age

are drawing nigh, and that these (being defects) are permanent, and not fleeting, for the clouds return after the rain.

It appears from some translations of Sir John Chardin, that the winter following spring is a common metaphor for the progress of life from infancy to age;(¹) and according to D'Herbelot (*Bibliotique Orientale*) there was a festival celebrated by the ancient Persians at the end of winter, called ‘Rocoub Alcousag,’ which are words signifying ‘the cavalcade of the old man without a beard.’ In this festival a bald and beardless old man, mounted on an ass, and holding a raven in one of his hands, went about striking with a switch all he met, and this figure is emblematical of winter; ‘consequently the converse of

(1) Oriental Literature, vol. ii. p. 76.

‘this must have appeared natural to them :
‘to represent old age by winter.’”

The words of Solomon, in the second verse, will be found, on examination, to be an exact delineation of an Eastern winter; hardly a cloud, according to Dr. Russell, is to be seen all summer; (*Description of Aleppo*, vol. i. p. 66); but the winter is frequently dark and gloomy, and often dark clouds return, and pour down a fresh deluge after a great deal of rain had descended just before. (*Description of Aleppo. Appendix.*) Whereas, after the first rains of autumn, there is frequently a considerable interval of fine weather before it rains again.

Now comes the time when the external characteristics of old age are marked; when the oak, from a vigorous leafy tree, becomes a hollowed stem bent by time, broken by the storm, its leaves scattered,

its ancient trunk grown over with parasitical moss, and its withered branches broken by every gust, the fury of the winds may reck upon it, when the fabric bends as it were imploringly to that earth which is so shortly to receive it.

As age creeps on, the body gradually yields to its iron grasp, it thins and loses vigour, tremors prevail, the hands are palsied, “the keepers of the house tremble;” the diminished weight of the wasted fabric is too much for the frail legs to support, and they give way under the burthen, “and the strong men bow themselves;” the gums are absorbed, the teeth drop out, so that “the grinders cease because they are few;” and the eyes are dimmed, “for those that “look out of the windows are darkened.”

Thus Solomon traces the progress of bodily infirmity; and equally true to nature do we find the decay of the faculties of the organs themselves figuratively detailed.

Digestion is impaired, not only in consequence of the altered state of the internal organs specially devoted to its purposes, but owing also to the incomplete mastication of the food, resulting from loss of teeth; “for the doors are shut in the streets when “the sound of the grinding is low.”

Old age requires less sleep than youth; and what rest it does take, is broken and generally uneasy: “senibus naturale est “vigilare;” and such is evidently the condition alluded to, when it is said, “he is to “rise at the voice of the bird.”

The speech becomes thickened, almost unintelligible, from the altered condition of the lungs, from the mucus that overcharges them, and from the organic changes in the different parts of the system that tend to the production of the voice.

The ears are deafened, for “the daughters of music are brought low.”

“Can I hear any more,” says Barzillai, (¹)
“the voice of singing men and singing
“women, wherefore then should thy ser-
“vant be yet a burthen to my lord the
“king?”

Then come childishness and timidity,
grey hairs, and disrelish for all kinds of
before-beloved merriment, and all desire is
lost; it is, indeed, a sad picture of hu-
manity, “when they shall be afraid of that
“which is high, and fears shall be in the
“way, and the almond-tree (²) shall flourish,
“and the grasshopper shall be a burthen,
“and desire shall fail, because man goeth
“to his long home, and the mourners go
“about the streets.”

This beautiful allegory is concluded by
describing the progressiveness of death in

(1) 2 Sam. xix. 35.

(2) The flowering of the almond is very white, hence used as
an emblem of the hoary head of age.

language as euphonous and magnificent as it is striking and characteristic.

“Or ever the silver cord be loosed, or the golden bowl be broken, or the pitcher broken at the fountain, or the wheel broken at the cistern :” need these words any explanation, any commentary ? they cannot.

Such then is the course of life, uninfluenced by diseases -- but a whole host of these, from the merest ache, to “the arrow that flieth by day,” and the “pestilence that walketh in darkness,” is the inheritance of human nature.

From the Sacred writings we learn, that disease and death are the consequences or “wages of sin,” and that both are of divine imposition, for “with a great plague will the Lord smite ;” and each may say to himself, “I know THOU wilt bring me to death.”

So impressed were the Hebrews with a

narrow superstitious mode of considering these subjects, that they would not permit the least idea of an influence from natural causes to intervene between their prejudices, and what should have been obvious to them by the tenor of the Mosaical law.

For it is there plainly shewn that the plague, though expressly stated to be of divine infliction, is to be treated under the sanction of God by human efforts and natural means, as is ordered of every thing in this world.

But so far were they opposed to this reading of the meaning of the laws of Moses, that “the ancient Hebrews,”⁽¹⁾ according to Mr. Cruden, “who were very little versed in the study of natural phi-

(1) I am sorry to say it is not only the ancient Hebrew or the predestinarian Turk that offer these arguments:—no; every day do I hear persons oppose, to the use of medical means, similar narrow and superstitious observations.

“ losophy, and not much accustomed to
“ recur to physical causes and consult
“ physicians when they were sick, imputed
“ their diseases generally to evil spirits, the
“ executioners of divine vengeance. If
“ their infirmities appeared to be beyond
“ what was usual, and the causes of them
“ were not known to them, they did not
“ fail to say that it was a blow from the
“ avenging hand of God. To *Him* the
“ wisest and most religious had recourse
“ for cure; and king Asa is blamed for
“ placing his confidence in physicians
“ when he had a very painful fit of the
“ gout in his feet, and for not applying
“ himself to the Lord.”

There are many passages, there can be no doubt, that attribute the inflicting of disease to the power of God, exerted specially to that purpose; yet these passages involve no reason why the usually

attendant natural causes and effects should not be present, nor consequently why they are not to be searched into and examined, nor do they involve any reasons whereby we are to infer that means differing from the ordinary course of nature are employed. Moreover we must bear in mind that the ordinary style of writing amongst the Eastern nations, is occasionally so redolent in figure and poetic illustration as at times to involve in very considerable obscurity the true meaning of the unadorned idea; and there can be no doubt that in many places the Sacred writings have received the impress of their style.

Dr. Mead, in speaking of the plague, is quite of this opinion; “ for these evils and calamities, (he observes,) which come suddenly, and strike all with terror, are said sometimes to proceed from God; but which

nevertheless have their origin in natural causes."

It appears to me absurd to suppose the laws which have been instituted to rule the world, are to be broken by Him who made them, unless there be some great and special cause for the exercise of miraculous interposition: and were it not the will of God that human means should be exerted, why did HE, through the medium of the Mosaical institutes, point out such human means as were necessary, and more than that, enjoin their employment—that blood should not be in the food, that dead flesh and swines' flesh should be unlawful, and that the diseased should find in a “several house” a separation from the healthy? All these things tend to shew, that God works his ways according to the ordinary laws of nature; and indeed the experience of past ages has shewn us, that a contrary

belief leads to culpable inactivity and superstitious inexertion.

As there can then be no doubt that the physical as well as moral evils, with which it has been deemed right to afflict man, are subjected to those laws of nature, which it has been also the Divine will to institute, I can see no reason why these infirmities and inflictions of human nature in general, and of persons in particular, as written in the Holy records, should not be canvassed, and an attempt made to a more clear understanding of what may be termed their natural relations to diseases as understood in the present day.

In pursuance of which object, I shall proceed to some discussion of those diseases which are the most striking and particular.

I shall follow no order or classification,

but consider first, those which are mentioned as of more general occurrence; and afterwards, some of the more especial examples of individual affliction : — Laying down, as my first proposition, that all these diseases are the infliction of God ; and, as my second, that they had their origin in, and were subject to, the ordinary laws to which diseases are said to be subject in the present day.

Of the antiquity of the science of medicine there can be no doubt ; for the earlier writings of the Holy Scriptures not only teem with allegorical allusions to physicians, and the efficacy of various medicines, but direct mention is made concerning them.

In Genesis we find physicians spoken of as embalmers, for “ Joseph commanded his servants, the physicians, to embalm his

father, and the physicians embalmed Israel.”⁽¹⁾

In another place, Asa, as beforementioned, is blamed for not having sought the Lord, but relying on physicians.⁽²⁾ This negative censure, together with that other which Scripture affords, “Physician heal thyself,” becomes of a more positive nature when, in unambiguous terms, we are told that “a certain woman had an issue of “blood, and had suffered many things of “many physicians, and had spent all that “she had, and was nothing bettered, but “rather grew worse.”⁽³⁾

Bryant has given, in his Observations on the Plagues of Egypt, some history of the state of medical matters amongst these people in the early ages.

(1) Genesis l. 2. (2) 2 Chronicles xvi. 12.

(3) Mark v. 25, 26.

It appears, from every thing we see of this nation, that they were peculiarly addicted to idolatry: any thing, and every thing, that was presented to them, under peculiar circumstances, became an object of worship; and some of their gods, of highest rank, were supposed to preside over pharmacy and medicine, and to these they generally applied themselves when suffering under maladies. It was from the Egyptians, it appears very evident, that the Greeks derived their mythology; in fact, the early settlers in the Grecian states were Egyptians, wherefore much stress is to be laid upon the authority of the ancient Greek writers where Egyptian matters are concerned.

According to some, the art of medicine has its origin from Isis: “*Την Ισιν—φαρμακων πολλων τροπον γιγειαν ενρετην.*”⁽¹⁾ But there can be

(1) *Diodorus*, lib. i.

no doubt that Æsculapius taught the art in Egypt; according to Pliny,(¹) “Medicinam Ægyptii apud ipsos volunt repertam.—Æsculapius Memphitis inter primos hominum numeratur, qui opinione humanâ dii facti sunt”—and the teaching of Æsculapius is referred by some authors to Osiris, whose son he was supposed to be.(²) Others assert that he learned it from Apis.(³)

Besides Æsculapius, there were many others of repute in Egypt, whose works were much esteemed. Sesorthrus, and King Athoth, son of Menis, who was thought to have been the second king of Egypt, were, according to Eusebius, greatly

(1) *Pliny*, lib. i. c. 36.

(2) Πολλα παρα τις πατρος των εις ιατρικην μαθοντα προσεξενρειν, την τε χειρεργιαν και τας των φαρμακων σκευασιας, και ριζων δυναμεις.—*Diod.* lib. 5.

(3) Ιατρικην Απιν, Αιγυπτιον αυτοχθονα, (*επινοησαι*), μετα δε ταυτα Ασκληπιον την τεχνην ανξησαι λεγεσιν.

skilled in all branches of physic, and the latter left behind him treatises upon the structure of the human body.⁽¹⁾

Syncellus speaks of these medical books of Athoth: “ But what are styled books and treatises, are supposed to have been originally hieroglyphical writings upon obelisks, or else in the syringes or sacred fountains, which were formed in rocks of Upper Egypt. That this learning was originally consigned to the cryptæ, or sacred camps of Egypt, and to obelisks, is mentioned by Manetho of Sebennys, which shews its great antiquity.”

The repute, in consequence of the skill of the Egyptian physicians, was very great, and spread their fame into distant countries,

(1) Ιατρικην τε εξησκησεν, και βιβλες ανατομικας συνεγραψεν.—Euseb. Chron. p. 14. For fuller notes upon the above, I must refer the reader to Bryant's own work.

and which character they maintained long after the kingdom lost its influence amongst the Eastern nations.

They were in great numbers; and it would appear that each physician had, as his peculiar province, the treatment of some particular disorder entrusted to him.

The author of the Observations on the Plagues of Egypt, thus concludes his account of the physicians : “ The Egyptians “ were continually providing against dis-“ orders; and they had persons who pre-“ tended to fortel their coming, both upon “ man and beast. In the time of Moses, “ we read of a particular distemper called “ the botch of Egypt; and the diseases of “ the country are mentioned in more places “ than one of Scripture. In consequence “ of this the people were in a continual “ state of purgation, and reposed a great “ confidence in their physicians, who were

“ maintained at the expense of the public.
“ These joined astrology to physic ; by
“ which they founded their pretended fore-
“ sight in respect to impending maladies :
“ and in consequence of it, they were
“ continually prescribing antidotes and pre-
“ ventatives to the people.”

From what has been stated above, and from the fact that Luke the Evangelist was a “ beloved physician,” one may conclude that, independently of the priests, who certainly often combined the office of physician to that of their more sacred functions, there was a distinct class educated for such profession, and who derived a reverence from practising it, especially when we are told, as before quoted, that King Asa sought not the Lord, but physicians ; for it is evident from this, if the profession of physic had been confined to the priesthood, the applying to the physicians would, by implication,

nue

have involved an application to the Lord through their mediation.

The province of the physician is distinctly marked out by several passages, “for they that are whole need not a physician, but they that are sick;” and that individuals amongst the profession enjoyed a relative value, may be inferred by Job’s accusing his friends of being physicians of no value.

Dr. Ramsbotham, in his introductory lecture, says, that in the early ages, we may presume that women mutually afforded each other those soothing attentions, of which, under labour, they stand so eminently in need, until some one more bold and experienced, took upon herself the duty of assisting at the birth of children.

That this was the commencement of the art of midwifery, is evident from the histories of the Hebrews and Egyptians. In

Genesis we read that Rachel the wife of Jacob, in her second labour, and Thamar the wife of Judah, were attended by two professed midwives. In the first chapter of Exodus again, we have another proof of the practice being in female hands. We are there informed that Pharoah, being alarmed at the rapid increase of the Israelites in Egypt, commanded the two Hebrew midwives, Shiphrah and Puah, to destroy all the male children at whose births they officiated.

The medicines themselves are not forgotten, for that tree is mentioned “whose “fruit shall be for meat, and the leaf “thereof for medicine.”

The fig was the means with which the sore of Ezekiah was cured; and the soothing efficacy of oils has made the expression one of favourite allegory. But why dwell upon a subject which must be fainiliar to

all, for “when the daughter is hurt, is there no balm in Gilead ? Is there no physician there ?”

LEPROSY.

THE early and frequent mention of leprosy in the sacred writings,—the high consideration of many of the persons that are there named as suffering under its infliction, together with the peculiar laws instituted by Moses relating to it, are sufficient in themselves to induce any inquiry respecting its nature with a degree of very considerable interest.

In looking over the Mosaical account as rendered in our translations, matters for discussion are soon presented:—as respecting the identity of diseases there mentioned with diseases which occur in the present day,—as to the general nature of their symptoms, whether what is written,

according to our English translation, refers to one disease, or includes under the generic term “leprosy,” many, and whether its contagiousness, which appears implied by its being said to be unclean, is a characteristic of similar diseases in the present day.

To one other point it will be necessary to refer, and that is whether our authorised translation be correct or not. Let us, however, turn to the consideration of “what a man full of leprosy” is, according to the sacred writer.

In the thirteenth chapter of Leviticus, it appears there are, if not different diseases, at least different varieties of the same disease described.

For there is that where the hair is white, and the affection is deeper than the skin, *i.e.* more than the cuticle is affected, the true skin being involved in its ravages:—

and that in which it is considered at its commencement of doubtful character, in which the hair is not white, but the skin spot is white, though not deeper than the skin. Twenty-one days is the limited period for clearing up the doubt. For if, at the expiration of that time, the skin have acquired a dark hue, it is not leprosy, but merely scab (dry scall or psoriasis), while if the scab spread, it is decided to be a leprosy.

It is also esteemed a leprosy when the hair is white, the rising white, and within the rising is seen a raw or proud flesh. Here a distinction as to the police of the disease is drawn, evidently referring to the relative contagiousness of its varieties, for in the verses from the twelfth to the seventeenth of the same chapter, we are informed that though it be a leprosy, yet if the affected person be white from head to foot,

yet he is clean; at the same time this is qualified by its being said, if there be any raw flesh, then he is unclean.

In another place, the first described variety is referred to as being the sequence of peculiar causes, for we are told, if after a boil (*furunculus*) there be a white rising, or a bright spot white or somewhat "reddish," which on examination appears lower (deeper would have been a better translation) than the skin, and the hair be white, it is a leprosy broken out of the boil.

But if there be no white hairs, and if it be not "lower" than the skin, and sometimes dark, it is to be considered doubtful. If, however, after seven days it spread, it is a leprosy, but should it not spread it is a burning boil only.

Further on, peculiar localities for the leprosy are specified; for it is said a plague upon the head or beard, if it be deeper

than the skin, accompanied by a yellow hair, it is called a dry scall,—a leprosy.

And degrees of this are spoken of in a similar manner to the general leprosy of the skin; for, if it be not deeper than the skin, and the black hair be not involved, and it do not spread, and also after shaving the hair it do not spread, it is not unclean: whereas if it be of a slightly severer nature and spread, although the hair be not involved, yet it must be considered unclean. If it do not spread, and black hair grow out, then is it healed.

In concluding the enumeration of the leprosies, Moses points out the natural freckling of the skin and baldness of the hair, contrasting them with the diseased conditions by observing that they are clean; unless in the bald head or bald forehead there be a white, or red sore, when it is said to be a leprosy and unclean.

It is sufficiently evident, from the above analysis alone, that very different diseases are included under one name, causing a degree of confusion which is by no means cleared up by reference to the earlier writers.

The term *Λέπρα* being derived from *λέπτος*, thus necessarily having for its etymon *λέπτος*, squama, should evidently refer solely to squamous diseases; but the term leprosy, as used above, according to our English translation includes diseases that are very different in their nature.

The writer (⁽¹⁾) of the article *Lepra*, in the *Cyclopædia of Medicine*, observes that “at a very early period of medical literature, the confusion which afterwards became worse confounded,” began to reign concerning lepra and leprosy.

(1) Dr. Houghton, physician to the Eastern Dispensary,
Dublin.

But this confusion, however, is by no means to be discovered in the Mosaical account, if properly translated; for as Dr. Mason Good, in his exceedingly learned work, the *Study of Medicine*, very justly observes, the descriptions given by Moses, of the cutaneous efflorescences and dis-quamations, which were common among the Hebrew tribes, are admirable and exact.

We cannot look to any authority earlier than the Pentateuch to clear up any doubts, should they arise, as to whence the Hebrews first contracted these maladies, though there appears but little doubt that they received the infliction from the Egyptians: — yet Manetho confidently asserts that they were the importers of these maladies into that country; an inference which is certainly opposed to the general feeling of the ancient writers, who, with very few exceptions, name Egypt as the source. Hence we find

Lucretius, when speaking of elephantiasis, a disease often confounded with leprosy, asserting,—

“ *Est Elephas morbus, qui propter flumina Nili,
Gignitur Ægypto in media.*”—*De Rerum Natura.*

The authority of the Bible upon this point is very pointed and distinctly marked, for we are told that “ the Lord will take away from thee all sickness ; and will put none of the evil diseases of Egypt upon thee.”—*Deut. vii.*

“ If thou wilt not observe to do all the words of this law,—then the Lord will make thy plagues wonderful, &c. Moreover, he will bring upon thee all the diseases of Egypt.”—*Deut. xxviii.*

Not only has error been perpetuated by the mis-interpretation of the meaning of Moses, but the works of the more recent oriental and Greek writers have been ren-

dered difficult to be understood, so great has been the confusion of terms.

According to the proper definition of lepra (the leprosis lepriasis, of Good) such diseases are included in it as have patches, or smooth laminated scales, generally of a circular form, and varying in size; and the learned author of the Study of Medicine says, that of the diseases which Moses has described, and whose medical police forms a part of the Levitical code, those which are distinguished by the name of Berat, or bright spot, may be distinctly said to coincide with the above definition.

Hippocrates and Galen both particularize these diseases: according to whom the *λέπρα αλφος* is; when the efflorescence is white, of slight roughness and not continuous, but occurs as if in dispersed spots, though occasionally these are broad and extensive, and it always creeps over the body with a healthy-looking surface intervening.

The *λέπρα μελας* differs from the *αλφος* merely in colour, since it is in some cases brownish, at others giving to the skin an appearance as if a shadow were cast over it.

The λέπρα λευκη, which Hippocrates terms a Phenician disease, φοινικιην νεσον, has something in common with the *albos*, but is whiter, and affects the skin deeper, moreover, has one symptom which is very characteristic, for the hair becomes white, and like wool.

This last circumstance is a proof how very considerable the morbid action of the skin is, as the hair forms a part of the cuticular system.

According to the original, the following should be parallel diseases :—

The λεπρα αλφος being the Boak, the λεπρα μελας being the Berat-cecha, and the λεπρα λευκη being the Berat-lebena.

The former of these is a very slight dis-

ease, while the last two are virulent and contagious.

So far, as Dr. Good very properly observes, the whole seems to be in perfect harmony. But in process of time many of the Arabians, especially Avicenna and Serapion, used Boak, the specific term, and Beras, the generic term, indiscriminately; and employed at the same time for the same purpose, a word of much more extensive meaning, Kuba or Kouba, which embraced all kinds of scaly eruptions, and hence confusion commenced. Nor was the subject made more intelligible by their mingling in their descriptions the names of two other diseases, Elephantia and Elephantiasis, totally different in their natures, and applying them to these. The true tubercular elephantiasis of the Greeks was called Jugam, and the thick or Barbadoes leg was termed Elephas and Elephantia.

Juzza

But then we find that Elephantiasis, properly so called, is styled Elephantia, by (the translator of) Haly Abbas—thus confusing the true tubercular disease with the large leg—and then by the translators of Coricen, Rhages, and Avir Zoar, the tubercular elephantiasis is called $\lambda\epsilon\pi\rho\alpha$, which, as before observed, is a scaly disease, and in no respect tubercular.

To shew how exceedingly obscure the “plain tale” told by Moses has been rendered, in consequence of the confusion, caused by these writers, creeping into the Greek version, I will point out a passage or two which become almost unintelligible.

For while the Arabians were using, as seen above, the words *berat* and *boak*, in the most indiscriminate manner, the Greeks assumed from the Hebrew word Psorat, the term $\pi\sigma\omega\rho\alpha$; the meaning of which word, according to Moses, is limited to the two

contagious or unclean leprosies, while they applied it to a crustaceous and papular disease, using instead the word *λεπρα*, and thus Paul of Egina makes a distinction where there should have been an identity of nomenclature. “*Λέπρα* per profunditatem “corporum cutem depascitur orbiculatiori “modo, et squamis piscium squamas si-“miles dimittit. *Ψυρα* autem magis in “superficie hæret, et varie figurata est.”

So that we find, as is seen from the definition given, that as “Lepra is a generic term, and runs parallel with Berat, so as to include the Boak or uncontaminating forms of the disease, the clearness, if not the entire sense, of the Hebrew, is greatly diminished in the Greek version.

“When we are told by Moses, in the language of the Hebrew Bible, that the priest shall examine the berat, or bright spot, accurately, and if it have the speci-

"fic marks, it is a tsorat (which the berat "is not necessarily), we readily understand "what is meant. But when he tells us, in "the language of the Greek Bible, that the "priest shall look at the berat, or *τηλαυχης* (which is itself necessarily a lepra), and if it "have the specific marks, it is a lepra, the "meaning, to say the least of it, is ob- "scure and doubtful;" and moreover, there could be no object gained by the examination.

Besides this confusion, *λεπρα*, as before stated, was employed also to express the elephantiasis, which involved the whole in further confusion, especially when we bear in mind that the elephantiasis of the Arabians was a different disease from that of the Greeks.

By a reference to the following, the true state of the question will be better comprehended:

Berat.	Boak	$\Delta\epsilon\pi\rho\alpha\; a\lambda\phi\oslash.$
Lepra.		
Vitiligo of	Tsorat	$\Delta\epsilon\pi\rho\alpha\; \mu\epsilon\lambda\alpha\cdot$
Celsus.		$\Delta\epsilon\pi\rho\alpha\; \lambda\epsilon\nu\kappa\eta\cdot$

From which it may be understood that the Berat (the generic term) is to be examined, in order that it may be seen if it have certain appearances, according to which it is a Boak, which includes but one variety; or a Tsorat, which includes two varieties, and which are the two berats, or leprosies, that were considered unclean.

According to Celsus, who explains the Greek terms, there are three species of vitiligo, the description of which sufficiently agree with the Mosaical account of the berats: nor does Celsus appear improperly to confound with them the elephantiasis. “ Αλφο\oslash vocatur ubi color albus est, fere subasper, et non continuus, ut quædam quasi guttæ dispersæ videantur; interdum etiam latius et cum quibusdam inter-

missionibus serpit. *Mēλas* colore ab hoc differt, quia niger est, et umbræ similis, cætera eadem sunt. *Λεύκη* habet quidam simile *ἄλφω* sed magis albida est, et altius descendit; in eaque albi pili sunt et lanugini similes. Omnia hæc serpunt sed in aliis celerius, in aliis tardius. Alphos et Melas in quibusdam variis temporibus orientur et disinunt. Leuce quem occupavit, non facile dimittit."

The description of the tubercular elephantiasis is equally succinct and true.

To give then a just idea of those diseases which are called Berat by Moses, and by ourselves Lepræ, it will be necessary to detail briefly their history, as far as the present improved state of science will permit.

The first variety, the Lepræ Alphoides of Willan, the Berat Boak of the Hebrews, is as the Greeks have described it, the mildest

species of the Lepræ being more superficial and less rough.

By Hippocrates this scaly alphos was rather considered a blemish than a disease, (*περὶ παθῶν.* sect. 15). γ

The scales are roughish, of a dull white, circular and defined, commencing by scattered elevations of the skin, glossy, and approaching to a red colour; surrounded by a dry red and slightly elevated border. The patches seldom exceed a few lines, or become confluent. There is a constant succession of new scales, for as some exfoliate and fall off, others are reproduced.

The patches rarely occur but on the limbs, very seldom indeed upon the face:— It is decidedly not contagious.

When in its confirmed state, it gives the parts affected a freckled character, which on close inspection appears formed of red patches and silvery scales irregularly dispersed.

“ This variety of Lepra is most common
“ in children, and girls under the age of
“ fourteen. When it affects adults, the
“ site of the scaly patches is considerably
“ redder than the surrounding parts; and
“ the exfoliating scales have a smooth red
“ glistening surface, which, in old cases,
“ is interrupted by fissures.”⁽¹⁾

It should appear from the history of this species that it is not originally a constitutional disease, but that, after long continuance, the constitution may become affected; and the Arabian and Greek physicians, on this account especially, draw a difference between this variety and those of a more virulent nature; such as the Lepra Nigricans, Lepra Vulgaris, and Tubercular Elephantiasis.

(1) Dr. Bateman on Cutaneous Diseases.

According to Dr. Willan, cold lowering diet, and the general causes of emaciation among the poor, especially those whose employment is of a dusty nature, such as chimney sweeps, dustmen, bricklayers, bakers, etc, are the remote causes of leprosy.

Here then, I think, we may trace some analogy with the history of the disease, as described in the Sacred writings ; for we may conclude, that the species in question was confined to poor Hebrews, whose labours were similar to those of the persons above named, as appears evident from the fact that the persons of exalted stations, who are spoken of as diseased, are generally said to have been affected, not by this slighter variety which I am describing, but by those of the more virulent and contagious character. And this coincidence between the two diseases, is further proved by observing, that both in the Sacred writings

and according to modern experience, the scaly patches begin where the skin and bone are near each other; that is to say, in those places where there is but little muscle, as in the elbow, spine, ileum, shoulder blades, etc., and scarcely ever make a first appearance on the fleshy parts of the leg, or within the flexures of the joints; for there, it may be noticed, is generally a considerable portion, if not of muscle, at any rate of tendon and cellular membrane.

It is not a little remarkable in the history of this disease, that it is almost universally the case that both sides of the body are similarly affected, both as to extent and character.

In its progress, it is very unlike active inflammations of the skin, for its commencement is not attended by febrile symptoms, nor are the first affected parts the first to

heal; but after the disease has reached that acme, which natural causes, or the intervention of medical means, permit, it declines equally over the whole body, and, generally speaking, those parts first affected, are the last to be quite recovered.

We may easily then identify with the history of this variety, that slighter leprosy, which, according to the Levitical code, is not unclean, and is there termed Boak.

The words of our translation run thus: “ If a man also, or a woman, have in the skin of their flesh bright spots, even white bright spots, then the priest shall look, and behold if the bright spots in the skin of their flesh be darkish white, it is a freckled spot that groweth in the skin: he is clean.” Dr. Good would thus render it: “ If a man or a woman have in the skin of their flesh a berat, a white berat, then the priest shall look; and behold, if

the berat in the skin of the flesh be dull, it is a boak growing in the skin: he is clean." If we only change the word Berat for leprosy, and instead of Boak, characterize the variety as being the dull white, and for the word clean, say it is not contagious, we reduce it to a just and intelligible English translation.

That the expression *clean* refers to its not being contagious is another argument to shew that the identity of the disease is confirmed in every particular. For, as this common leprosy is not contaminating, Moses decides it to be clean, as it is very evident from the tenor of the Jewish laws, which, at least, have every semblance of cleanliness and purity, that had this disease been other than the ordinary and uncontaminating leprosy, quarantine regulations, (so imperious on other occasions,) would have been put in effect.

The author of the *Study of Medicine* very properly observes, in reference to the frequent separating in many countries of those affected with this slighter disease from the healthy, that “although in most countries, where leprosy is a common malady, places of separate residence are usually allotted to those affected with it, under whatever modifications it may appear, this has rather been from an erroneous interpretation of the Jewish law, and an ignorance of the exceptions that are introduced into it.”

M. Forskål states, in confirmation of the assertion of Niebuhr,(¹) “that one of the species of leprosy to which the Arabians are subject, is to the present day called Boak.” The Arabs call a sort of leprosy, in which various spots cover the body,

(1) Oriental Literature, vol. i. p. 217.

Behaq; whlch is without doubt the same as is named bohac or behac, in the thirteenth chapter of Leviticus.

They believe it to be far from contagious, that one may lie with the person affected without danger. “On May 15, 1763,” says he, “I myself first saw the eruption called Bohak in a Jew at Mocha. The spots of this eruption are of unequal size: they do not shine, are imperceptibly higher than the skin, and do not change the colour of the hair; the colour is of a dirty white, or rather reddish. This disorder is neither contagious nor hereditary, and does not cause any bodily inconvenience.”—“Hence,” as Rosenmüller observes, “it appears why a person affected with the bohaq is declared in the above law not to be unclean.”

The LEPRA NIGRICANS, which is the slighter variety of Tsorats, or contagious

and inveterate lepras, derives its name from the colour which the scales assume,—they are not however really black; and the disease may be thus defined: “ Scales glabrous, dusky or livid, without central depression; patches increasing in size, scattered or confluent, and contagious.”

Celsus, and other ancient writers, considered this disease equally a superficial affection, as the *αλφος*, “ *Μελας*, colore ab hoc differt, qui niger est, et umbræ similis: cætera eadem sunt.” Therefore we are to conclude, that he deemed it, the colour excepted, to be the same disease in all its bearings.

There can be no doubt it is a misnomer, to term the eruption “ black,” as the *Μελας* so positively defines it. Celsus very properly qualifies the term “ niger,” which he applies to it, by adding “ *umbræ similis:*” and Dr. Good assures us, that in such sense

we are to understand the Jewish legislator; for the colour, as described by him, is rather darkling, obscure, or fuscous. “The term used is *cecha*, whence the Latin *cœcus*: and it immediately imports obfuscous, or overcast with shade or smoke.”

The slight account given by Moses of this variety (*Berat-cecha*) is however quite sufficient to identify it. “But if the priest look upon it, and behold there be no white hairs therein, and if it be not lower than the skin, but be somewhat dark, then the priest shall shut him up seven days.”

“And, if it spread much abroad in the skin, then the priest shall pronounce him unclean.”

Michaelis⁽¹⁾ says, “Precisely the same measures were adopted in the Island of Barbadoes, when the leprosy broke out

(1) Vide, Oriental Literature.

there. The patients were shut up for seven days; at the expiration of which time, it appeared whether the disease were the real leprosy, or only a coarser African itch, which is there called crocrown."

I shall now proceed to a brief consideration of the remaining variety: it is so fully described in the Sacred writings, that there is scarcely a word of explanation required. From its inveteracy, it may well be styled the leprosy, for **LEPRA CANDIDA** ($\Lambda\acute{\epsilon}\pi\rho\alpha\lambda\epsilon\nu\kappa\eta$) is, of all others, the disease that most completely undermines the constitution: taking that hold, which leaves little hope that the sufferer is ever to recover from its devastating influence. It is defined as "having scales on an elevated base, which are glossy white, with a deep central depression, encircled with a red border; patches increasing in size; hairs on the patches, white or hoary, diffused over the body, and contagious."

In the history of this disease, as handed down to us by the ancient writers, and confirmed by modern observation, the identity with the Mosaic account appears complete, both as regards its symptoms and predisposing causes; for it is the class of persons, who are working in dust and under privations, such as the Jews were subject to, when detained among the Egyptians, that are the most liable to it.

And then, from its contagiousness, it is easily understood how, subsequently, those were affected who were not so liable to suffer hardships.

Dr. Bateman describes this disease as commencing with small, round, reddish, and shining elevations of the skin; at first smooth, but, in a day or two, exhibiting white scales on their tops:—these scales gradually, sometimes rapidly, dilate to the size of half a crown, are depressed in the

centre, still retaining their oval circular form, and are covered with shining scales, not unlike mica or asbestos, but more opaque, and encircled by a dry red and slightly elevated border.

Various states are described by Moses as sufficient to justify a suspicion of the presence of the disease; such as herpes,⁽¹⁾ dry scall,⁽²⁾ humid scall,⁽³⁾ the bright white scall,⁽⁴⁾ dull white scall,⁽⁵⁾ bruise,⁽⁶⁾ boil,⁽⁷⁾ and carbuncle;⁽⁸⁾ and in order to form a correct diagnosis, seven or fourteen days are allowed.

The occurrence of any of these was sufficient to render it necessary for the priest to examine; and, according to the appearances, after the expiration of the times

(1) Leviticus xiii. 2, 10, 13, 19.

(2) Ver. 2, 6, 7.

(3) Ver. 30, 31.

(4) Ver. 2.

(5) Ver. 39.

(6) Ver. 29, 42.

(7) Ver. 18.

(8) Ver. 24.

specified by Moses, was the person declared infected by, or free from, one of the two Tsorts.

And, as a proof of the inveteracy of this last variety, if the patches ulcerated, with fungous growths, the sufferer was declared unclean for life; which coincides with the statement of Actuarius, that the worst form of lepra penetrates deep, forms circular eruptions, and certain funguses and deliquescentes of flesh.

Rosenmüller, as quoted in the Oriental Literature, (⁽¹⁾) asserts that the leprosy is a contagious and dreadful disorder, which slowly consumes the human body, is common, particularly, in Egypt and Syria, but is also met with in other hot climates, and generally manifests itself in the manner described in Leviticus.

(1) Vol. i. p. 214.

Peysonnel,⁽¹⁾ a French physician, gives a melancholy picture of its effects as seen by him in the Island of Guadaloupe.

Many have confounded this disease with the Tubercular Elephantiasis, and to this day, in the Greek Islands, the confusion remains: for we are well assured the disease prevailing in these districts, though termed Elephantiasis, has no character of this disease, but is really and truly the inveterate disorder described by Moses, in which there is nothing of the thick, rugose, livid, tubercular, or insensible skin: nothing of the fierce and staring eyes, hoarse and nasal voice, or of the general falling off of the hair.

The Arabian physicians had described, under different names, the various affections occurring in the skin, but which often

(1) Vide Michaelis' Mosaic Law.

became misapplied by those who quoted them ; and the Latin translators invariably rendered the word *juzam* by lepra, while in reality it designated the Tubercular Elephantiasis. But besides this, we must take into consideration that some of the Arabian physicians conceived that the lepra terminated at times in elephantiasis, thus making them different stages of one disease. Alsahavarius thus unites and confounds them.

In confirmation, Dr. Good concludes his history of the disease by observing, “ Thus, Mr. Jowett, in his very interesting work, the Christian Researches in the Mediterranean, in describing the beautiful, but now, from its political reverses, most pitiable Island of Haivali or Kydonia, near Scio, ‘ A little further on is the hospital for lepers : it was founded by a leper. Elephantiasis is no uncommon disorder in these parts : its

effects are very offensive. I saw poor men and women with their fingers or legs literally *wearing* or *wasting away* :—forming a character directly opposite to what occurs in proper elephantiasis; where the limbs, though they continue to crack, continue to thicken enormously, even to the moment of separation.' Dr. Henderson, (¹) on the contrary, while describing the real elephantiasis in Iceland, calls it the Jewish leprosy, and offers a sort of apology for Moses, on account of his not having noticed the very striking anaesthesia or insensibility of the skin:—the direct answer is, that Moses delineates a different disorder, and one in which no such symptom exists.

With regard to the police, instituted by Moses, on the occurrence of these disorders,

(1) Journal of a residence in Iceland.

there can be but one opinion as to its wisdom.

It appears evident, that the injunction against swine flesh was, in a great measure, referable to its use being a cause of these cutaneous disorders; for modern physicians have confirmed the statement of Manetho, that those who ate of it were infallibly afflicted with leprosy; and Michaelis says, that none can recover from any cutaneous disorders, unless they abstain from its use.

It was not only the Jews who abstained, but many others, who had no fear of infringing a divine law; as, for instance, according to Pliny, the Saracens and Arabians, and, according to other authors, the Egyptians and Phenicians; and Lafitu says, that such is the case with the South American nations.

Baron Larrey ascribes the attacks of lepra, which the French suffered in Egypt,

to the unwholesome character of the pork in that country ; for all those who lived upon pork for some time were attacked by a leprous eruption.⁽¹⁾

Upon the authority of Dr. Mead, we are informed, that under the impression that these diseases were common amongst the earlier Egyptians, some authors, who were not well disposed towards the Jews, have jeeringly asserted, after speaking of the ill effects of swine's flesh, that these animals were driven from Egypt, “ nimirum ne scabies et vitiligo morbus illis (the Egyptians) communis leproque dictus ad pluris,” *ad plures serpentes* into Judæa, that the inhabitants might reap the advantage.

I have my doubts, whether we are to consider the “leprosy,” mentioned in the verses from the twenty-ninth to the thirty-

(1) Relation Chirurgicale de l'armie d'orient.

eighth, as identical with any of the varieties of the disease just described; for we have seen that the ordinary effect of those varieties is to involve the surface generally, which we may justly infer, from the restricted wording of these verses, not to be the case in the present instance: it certainly happens that in advanced leprosies the hairy scalp and beard are often affected, and when it would be difficult to distinguish them from the pustular diseases to which, I am inclined to attribute, they refer; but their history affords us no reason for supposing that the head or beard is a primary seat of the affection, as should be the case, were we to assume that these verses related to it.

To refer to the text:—“ If a man or a woman have a plague upon the head or the beard, then the priest shall see the plague, and behold, if it be in sight deeper than

the skin, and there be in it a yellow thin hair,⁽¹⁾ then the priest shall pronounce him unclean: it is a dry scall, even a leprosy upon the head or beard."

In continuation, Moses tells us, that if it be not deeper than the skin, and the black hair be not involved, and it does not spread, and after shaving the hair it does not spread, it is not unclean; but if it spread, though the hair be not involved, it is unclean. If it do not spread, and black hair grow out, it is healed.

It may appear at first sight, that the original text is so sufficiently crude and incomplete, as to render our recognising the disease a matter of uncertainty. But if

(1) *Capillus flavus, solitoque subtilior.* *Vulg.*—Geddes thinks this should be rendered a "yellowish hair," and not "a yellow thin hair." Our version is followed by Bate and Purver.

we bear in mind, that a large number of diseases belong to one great class, and whose general symptoms bear a striking relation to each other, the distinguishing and arranging of which, in separate orders and genera, has been the triumph of more modern observation and industry, we can not but be surprised, that in the early days in which these diseases were described by the sacred historian, that one generic term may have included diseases, which are separated by our modern classification.

As a proof of this we may state, that, although it seems obvious, the origin of the term Pustular was derived from the purulent contents of the eruption, (*quasi pus tulit*), nevertheless, the ancient writers give their authority for using it in the most indefinite manner, applying it very generally to the most opposite risings on the surface. Celsus himself applies it, as Dr.

Thomson observes, to every *elevation* of the cuticle, including even wheels and papulæ, “quæ ex urtica vel ex sudore nascuntur,” and he deems it synonymous with *εξανθημα* of the Greeks, which was, in fact, the general term for every species of eruption. (Celsus’ de Med. lib. v. cap. 28).

The term under which the Greek physicians comprehended both pustules and vesications was *φλυκταιναι*, and which their translators have rendered by the word pustulæ, and in this double sense the latter has also been generally used⁽¹⁾.

From a consideration of the verses now quoted, I am inclined to think they refer to the porrigo, a species of the class of pustular diseases; while, as before stated, the

(1) Vide Dr. Thomson’s Notes to Bateman on Cutaneous Diseases.

leprosy belongs to that of squamous diseases.

Pustular diseases are defined as elevations of the cuticle, with an inflamed base, containing pus; which elevations are termed pustules, and of which there are different varieties.

I am inclined to think that, in the present instance, we are to consider the text as referring to that variety which is termed Psydracium; it cannot be the Phlyzacium, as the original never alludes to its being a burning sore, which is especially specified in other cases; for “the phlyzacia were so denominated from the heat of the eruption, while the psydracia received their appellation from the opposite quality, ‘quasi *ψυκρα νόρακια*, id est *frigidæ*, seu *frigifactæ guttulæ*,’” says Gorræus. Moreover, the psydracia are enumerated by Alexander and Paul, and some other Greek writers,

among the eruptions peculiar to the head.

It is a small pustule, often irregularly circumscribed, raised but very slightly above the surface of the skin, often discharging its contents, which, drying, form a yellow scurf.

A porrigo is defined as an eruption of straw-coloured pustules, concreting into yellow or brownish crusts, of which there are many varieties: that to which I consider these verses refer, is the *furfurans*, furfuraceous, or branny scall; with which, to say the least of it, the Mosaic account, as will be seen from the following history, is not contradictory.

Dr. Bateman describes the porrigo *furfurans* as commencing with an eruption of small *achores* (?): the discharge from these pustules is moderate in quantity, and the excoriation slight; the humour therefore

soon concretes, and separates in innumerable thin laminated scales, or scale-like exfoliations. At irregular periods the pustules re-appear, and the discharge being renewed, the eruption becomes moist; but it soon dies again and exfoliates. It is attended by a good deal of itching, and some soreness of the scalp, to which the disease is generally confined. The hair, which partially falls off, becomes thin, less strong in its texture, and sometimes lighter in its colour.

The ushering in of this eruption is seldom or ever attended by fever; the appearance of the pustules themselves is the ordinary cause of the patient's first regarding himself as diseased. That it is eminently contagious, as proved by the experience of modern times, is quite sufficient reason why it should have been deemed unclean in the Mosaic institutes.

Though we have seen, from the statement of Dr. Bateman, that the hair becomes “lighter in colour,” I should myself be inclined to think, that the meaning of the original rather refers to the copious deposit of the yellow furfuraceous matter investing the roots and lower parts of the hair, which gives it the appearance of a yellow colour. Dr. John Gill, in his Exposition of the Old Testament, says that, according to the Targum of Jonathan, it has the appearance of thin gold; “for, as Ben Gersom says, its colour is the colour of gold, and it is called thin in this place, because it is short and soft, and not when it is long and small; and so it is said, scabs make unclean in two weeks, by two signs, by their yellow hair, and by spreading; by yellow hair, small, soft, and short.”

The Septuagint version renders it a wound instead of a dry scall; and Sarchi affirms,

"that *nethek*, which is the word here used, is the name of a plague, that is in the place of hair, or where that grows: it has its name from plucking up; for there the hair is plucked up, as Eben Ezra and Ben Gersom note."

It is not a little singular, that in this thirteenth chapter of Leviticus, when speaking of the general leprosies, it merely alludes to men (of course, as I presume, taken in the general scriptural acceptation of the term, i. e. including both sexes), while in speaking of these affections of the hair, women are specially and particularly mentioned, which strikingly coincides with what authors have observed, "that the porrigo furfurans occurs principally in adults, *especially in females*, in whom, it is not always distinguished from the scaly diseases, pityriasis, psoriasis, or lepra, affecting the capillitium."

Boothroyd says, in a note to his edition of the Hebrew Bible, that he can find no better term, to express the meaning of the original, than that used in our common versions, “ scall or dandruff :” it will be seen, however, that this latter word does not accord with our modern acceptation of the term ; for the dandriff, or common dry scall, is a very different disease to the furfuraceous porrigo, which would necessarily come under the denomination of unclean, according to the Mosaical institutes, while I should doubt very much if such a judgment would have been recorded against the other. “ It is in fact,” says Dr. Thomson, “ to a furfuraceous disease alone, that translators of the Greek physicians, and many modern Latin writers, apply the term porrigo, deeming it synonymous with the Greek *πτυψίασις*.” From the authority of Celsus, however, it is obvious, that this

is a misapplication of the term; and it is improper to comprehend the single dandriff and the contagious scall, under the same generic appellation. Plenck, though applying the term to both, makes the distinction, calling the contagious disease *Porrido furfuracea, seu vera*; and the other, *Porrido farinosa, seu spuria*. Dr. Bateman says this variety (the porrido furfurans) may easily be distinguished from the pityriasis (which is the dandriff) by the following circumstances,—that in this last no pustules occur in the beginning, there is no moisture in ulceration, and the HAIR IS NOT DETACHED OR CHANGED IN COLOUR.

The following, from the *Study of Medicine*, is ample confirmation, although it points out that confusion may easily occur, that these verses refer to the disease I am willing to attribute them.

“The furfuraceous or branny scall makes

a still nearer approach to the tribe of lepidosis, and is often mistaken for a pityriasis or lepriasis, particularly, when it appears in the scalp, which is its most common seat. It commences, however, if its course be watched, with an eruption of minute pustules, which nevertheless possess a very small quantity of fluid, so that the whole is soon absorbed, and the excoriation or ulceration is but slight.

“It is apt to be renewed, is attended by a considerable degree of itching, and some soreness of the scalp ; the hair partially falls off, becomes thin, less strong in its texture, and somewhat lighter in its colour, none of which symptoms occur in any species of the true scaly eruption.”

That “leprosy” mentioned as affecting the beard is most probably the sycosis menti :—the Greek physicians applied this term, i. e. sycosis, to larger kinds of tubers,

deriving it from $\sigma\delta\kappa\omega\nu$, a fig; by Celsus, and modern writers, it is confined to the eruptions, or running on the chin. In many respects, it is very like a porrigo, and, I think, might almost be esteemed as one: the differences are too technical, at any rate, to induce one further to dwell here upon this subject.

The thirty-eighth to the forty-first verses merely relate to the natural freckling of the skin, and the customary falling off of the hair; but the verses to the forty-fifth evidently refer to old and extreme cases of leprosy, when the sufferer is considered as utterly unclean.

We have seen, in different parts of this chapter, that those suspected are to be shut up for seven days. According to the opinion of some learned commentators, this is an incorrect rendering of the original. I should be sorry to offer any opinion upon their arguments, but I cannot help think-

ing there is great truth in what they advance.

Boothroyd, who certainly is an authority of no mean consideration, says, he “cannot but think that the order for the treatment of those who were suspected to have been attacked by the leprosy, as it is represented in this chapter, is very greatly mistaken. We are there told, that if any man had a swelling, or a scab, or a pimple in his flesh, he was to shew it to the priest; and though there were no apparent signs of a leprosy, the priest was to *shut up him that had the plague* seven days, and if he could not pronounce the person clean at seven days, he was to shut him up seven days more.” According to this account, every person, upon the least imaginable suspicion, must undergo a confinement of a week or a fortnight’s continuance; whereas he who really had the leprosy upon him,

was not to be under any confinement at all (see verse 11). But every thing that here appears improbable, or unaccountable, arises from the errors in our version ; where, in the compass of those few words, ‘ shut up him that hath the plague,’ we have no less than three mistakes. 1. Shut up, instead *see v.* of bind up. 2. Plague, instead of sore. 3. Him that hath, is unnecessarily added. And, in short, give only the literal version of the original, and neither any difficulties nor any improbabilities remain. “The priest shall bind up the sore seven days.” And in the following verses, the mistaking the purport of the relative pronoun hath occasioned the same errors to be carried on through the whole chapter. “The priest shall *shut him*,” instead of “*bind it* up seven days.”—Pilkington. Bishop Law adopts the same rendering ; and it certainly obviates many difficulties.”

These same commentators also esteem the rendering of the forty-fifth verse as erroneous: instead of the upper lip, it should appear, on their authority, that it means that portion on which the hair surrounding the mouth grows; “but it cannot mean either the lip or the upper lips, properly so called. It may possibly denote the *hair* about the lips, and so Saadias understood it. I am apt to think,(¹) however, that it was not the *upper lip*, nor the *mustachios* on it, that was covered, but the whole *chin* and *beard*; so that the mouth had just freedom to make the declaration ‘unclean, unclean!’ which thus tied up, it must have done in a most doleful and alarming accent.”

Sarchi(²) interprets it of both lips, upper and under, which were covered with a linen

(1) Boothroyd.

(2) Vide, Gill’s Commentary.

cloth or veil, thrown over the shoulder, and with which the mouth was covered; and this was done, as Eben Ezra says, that the leper might not hurt any one with the breath of his mouth; and shall cry, unclean, unclean! as he passed along in any public place, that every one might avoid him, and not be polluted by him.

Before leaving the consideration of these matters, I think I ought not to omit saying some few words on that subject, which appears so opposed to our ordinary notions of the relations that exist between disease and the inanimate substances described, in the sacred writings, as being inflicted with it;—I allude to that which is termed the leprosy of the clothes, etc., and houses.

With regard to the clothes, were it not for the mention of the plague being “greenish or reddish in the garment, etc.” there would be no reason why this plague

should not refer to their being destroyed by moths.

Some have endeavoured to shew that it consisted in the saturating of the different substances, said to be infected with what exuded from the lepers, and which rendered them “leprous:” but what has been said is so indistinct and unsatisfactory, that it appears needless to enter further on its discussion.

There can be no doubt that the view Rosenmüller takes of “the plague in the house” is the correct one:—that it has nothing to do with the diseases, which have been under consideration, but is to be attributed to the natural consequences of the walls, containing a quantity of natron, (muriate of soda), which, being an efflorescent salt, has the power of absorbing the moisture from the atmosphere, thus blistering the walls, and producing in them an *deliquesce*

appearance, so parallel to that which is effected by leprosy in the human body, as to render it, by no means, a matter of wonder, that the figurative meaning of the term might attach itself to it. But, a very strong confirmation of this view is offered by Faber⁽¹⁾, when speaking of the wall salt.

“ It is frequently found,” says he, “ on damp walls, which stand on wet ground, or have been built in the winter, and are not yet dry. It issues from the wall like hoar-frost, makes the plaster rise in form of large blisters, and so corrodes it, that it falls off, and leaves deep holes. Greenish and other spots are likewise observed on such walls.” If the moisture increases, this salt becomes fluid, which trickles down the walls. The tapestry, and every thing in the room near such a wall, as beds and the like, become rotten. Even if the

(1) Archæology of the Hebrews.

plaister is quite scraped off, and white-washed afresh, it is of no avail, the corrosive salt still returns. The only remedy in this case is to pull down the wall, and to build another of dry material, such as brick, in its place. Volney also mentions these effects as being very common in Egypt, but attributes it to salts contained in the atmosphere, which cannot be correct; but, as Volney was not acquainted with chemical science, his observations are not the less valuable, though his explanations be incorrect. The moist condition, in which our common table salt is ever found, unless kept at an evaporating temperature, is an illustration of the absorbing power of efflorescent salts; and were we, by way of experiment, to mix it with mortar, and expose it to the same conditions as the plaister of a house is subjected to, we should find that similar results, as now described, would take place.

PLAGUE.

UNDER this term, I purpose entering into some short explanations of the disease, exclusively so called in modern times, having, for its character, a fever of a most malignant, putrid, and contagious nature, the symptoms of which are attended with extreme debility, a specific “muddy” appearance of the eye, buboes, carbuncles, erisipelatous blush, petechiæ, vibices, and diarrhæa.

There can be no doubt that the term Plague, as used in the Sacred writings, has a very comprehensive application, specifying indeed, if one may so express it, a quality of ALL sicknesses, and of many other disagreeables!—Thus we read of the “plague of leprosy,”⁽¹⁾ and “the plague

(1). Leviticus xiii.

wherewith the Lord will smite all the people, that have fought against Jerusalem: their flesh shall consume away while they stand upon their feet, and their eyes shall consume away in their holes, and their tongues shall consume away in their mouths.”⁽¹⁾

And in another place, alluding evidently to a different disease, “Behold, with a great plague (stroke) will the Lord smite thy people, and thy children, and thy wives, and all thy goods.

“ And thou shalt have great sickness by disease of thy bowels, until thy bowels shall fall out, by reason of the sickness day by day.”⁽²⁾

We find it also applied elsewhere as a qualifying epithet to man; thus, “we have this man a pestilent fellow.”

(1) Zachariah xiii. 12.

(2) 2 Chronicles xxi. 14, 15.

It is a curious fact, as Dr. Brown⁽¹⁾ observes, when speaking of the synonyms of this disease, that these words have each, in their respective languages, a signification distinct from the primary one, and expressive of various kinds of moral and physical evil: the malignancy of the disease, in all situations, being thus evinced, by its suggesting the same analogy to people differing widely in physical constitution and moral habitude.

In confirmation of this, as the author⁽²⁾ of the Oriental Literature observes, the words $\pi\lambda\gamma\gamma\eta$, $\lambda\omega\mu\sigma$, and pestis—the plague, or pestilence—are used both by Greek and Roman authors, to signify a very bad or profligate man. Tertullus did not say that Paul was a pestilent fellow, but that he

(1) Cyclopædia of Medicine, art. *Plague*.

(2) Rev. Samuel Burder.

was the very pestilence itself: and in this strong sense Martial uses it, when he says,—

“ Non vitiosus homo es, O Zoiles, sed vitium.”

“ Thou art not a vicious man, O Zoilus, but thou art vice itself.”

So, in like manner, various terms amongst oriental writers are made emblematical, from some peculiar character they may possess, of the plague itself:—thus, “ the arrow that flieth by day” is, amongst the Arabians, applied as a figurative expression of its meaning; and Burder, in a quotation from Busbequius, offers, as an illustration, the following:—“ I desired to remove to a less contagious air. I received from Solyman, the emperor, this message: that the emperor wondered what I meant, in desiring to remove my habitation. Is not the pestilence God’s arrow, which will always hit his mark? If God would visit me herewith,

how could I avoid it? Is not the plague, (said he) in my own palace? yet I do not think of removing."

We find the same opinion expressed in Smith's Remarks on the Turks :—“ What! is not the plague the dart of Almighty God, and can we escape the blow he levels at us? Is not his hand steady to hit the person he aims at? Can we run out of his sight, and beyond his power?” So Herbert, speaking of Curroon, says, “ That year his empire was so wounded with God’s arrows of plague, pestilence, and famine, as this thousand years before was never so terrible.”

Dr. Mead says, in his History of the Plague, that in the most ancient times this disease, as well as many others, was looked upon as a divine judgment, sent to punish the wickedness of mankind; and, therefore, the only defence sought after was

by sacrifices and lustrations to appease the anger of incensed heaven.

Although, however, the analogous words are susceptible of taking a very comprehensive meaning in the different languages, yet one disease has particularly attached to itself the epithet of plague, and its synonyms—the *λοιμός* of the Greeks, the *pestis* of Latin authors; a term, derived from *πληγή*, *plaga*, having for its root the verb *πλησσω*, from which we also derive our English appellative, and which derivation gives a peculiar force to the rendering of our version, “And the Lord *smote* the people with a very great plague.”⁽¹⁾

Now we are aware, from recent, as well as earlier annals, that the plague is a disease frequent in Egypt and the Holy Land: a history of the symptoms of which, together

(1) Numbers xi. 30.

with the attendant mortality, will lead us to infer, that it is a disease, analogous to one of the diseases, mentioned in the Sacred writings under this term; when it is said, “HE will bring upon thee all the diseases of Egypt, which thou wast afraid of, and they shall cleave unto thee; also every sickness, and every plague, which is not written in the book of this law; them will the Lord bring upon thee, until thou be destroyed.”⁽¹⁾

Eben Ezra says, in his Commentary, on “the Lord smote the people with a very great plague,” that this passage refers to the pestilence; and in which, according to Sulpitius the historian (*Historia Sacra*), twenty-three thousands perished.

Though the infliction of this mortality be

(1) Καὶ πᾶσαν μαλακιαν, καὶ πᾶσαν πληγὴν τὴν μὴ γεγραμμένην,” etc.—Deuteronomy xxviii. 60, 61.

visited on the people by divine will, we are by no means to infer that the disease, whereby it was ostensibly effected, was of a new or miraculous nature; on the contrary, it was the disease of the country, in which they had resided, as is directly asserted in the verses just quoted.

To shew how very vague and opposite the ideas of persons, generally speaking, have been, in respect to the disease that this term applies to, we find Dr. Gill, in his Commentary on the verse, “Even those men that did bring up the evil report upon the land, died by the plague before the Lord,”⁽¹⁾ saying that they, and they only, at this time, died by the *plague* before the Lord, either by the pestilence immediately sent upon them by the Lord, or by a flash of lightning from him, or in some other

(1) Καὶ ἀ πέθανον οἱ ἄνθρωποι οἱ κατείπαντες πονηρὰ κατὰ τῆς γῆς ἐν τῇ πληγῇ ἔναντι Κυρίου.—Numbers xvi. 37

way, however, by the immediate hand of God, and in his presence; they being in the tabernacle of the congregation (v. 10). For my own part, I cannot see the reason why this learned commentator should for a moment suppose it to be “lightning, or some other way,” when the plague ($\pi\lambda\eta\gamma\gamma$), and nothing else but the plague, is mentioned or indicated: surely, had it been lightning, such a remarkable and miraculous occurrence would have found notice in the impressive writings of Scripture. The Jews themselves differently relate the manner of their death: “some say worms came out of their navels and crawled up to their jaws, and ate them and their tongues; and others say, that these worms came out of their tongues, and entered their navels.”⁽¹⁾

(1) The aphorismal character that these descriptions justly enjoy, is ably exposed in some recent articles in a northern magazine.—Vide, *Blackwood*.

The observation of Rosenmüller is especially worthy of remark : “ Hinc totus hic versus nil aliud continebit quam hoc inter ipsam cotur-nicum epulationem multos homines esse sublatos ; id quod prisci homines pœnam murmurationis contra Deum existimarent, *Causa vero subitæ illius mortis, sine dubio, naturalis erat* : scilicet jam veteres observarunt coturnices elleboro et aliis herbis venenatis vesci solere : qua de re multa collegit Bochartus. Talibus coturnicibus qui vescabantur Isralitæ esu carnium harum insalubrium perierunt.”

Besides, the particular symptoms that are mentioned as belonging to the plague, the striking mortality, attendant on its infliction, is peculiarly dwelt upon, as being a prominent characteristic : we shall find that this is no less the case in the present day. Thus, in the sixteenth chapter of Numbers, we are told that “ the plague is

begun," and that fourteen thousands and seven hundred, beside those that died about the matter of Korah, fell a sacrifice to it: and in the twenty-fifth chapter, the deaths from the plague, which by Josephus is considered to be the pestilence, properly so called, are estimated at twenty and four thousands. This, however, does not appear quite correct, for Moses here includes the thousand that were hanged against the sun, whilst Saint Paul⁽¹⁾ calls it twenty-three thousands, including in that number, but only those that fell by the plague itself.

It would be needless to quote here more passages to the effect of the mortality of the plague, which, it should be particularly remarked, is not mentioned as an immediate consequence of the leprosies and other diseases, as every one, conversant with the

(1) Corinthians x. 8.

Sacred writings, will be able to call to mind corroborative passages.

I shall now proceed to give a condensed view of the plague, as described by the various authors, who have been eyewitnesses of its ravages; pointing out, where opportunity offers, such coincidences as agree with the passages referring to it in the Old Testament.

The plague, arthracia pestis, of Good,⁽¹⁾ pestis, of Cullen,⁽²⁾ will find, in the following, a sufficiently correct definition to convey a general idea of its character, taking into consideration, as is always to be done, that

(1) Tumours bubonous, carbuncular, or both, appearing at an uncertain time of the disease; eyes with a muddy glistening; fever, a malignant typhus, with extreme internal heat and debility, contagious.

(2) Typhus maximè contagiosa, cum summa debilitate. Incerto morbi die, eruptio bubonum vel anthracum, variat gradu.

individual cases may occur, which may not altogether come within the pale of its description.⁽¹⁾

“An exanthematous disease, the eruption consisting of buboes, carbuncles, and pustules, white, livid, or black, distributed in various parts of the body, and generally attended with malignant and very fatal fever.”

Dr. Mason Good, whose definition is not so comprehensive as the above, makes three distinct varieties: the FRUCTIFERA, or common plague, in which the disease extends to about the fourteenth day, and is relieved by the appearance of the eruption.

(1) The difficulty of presenting a definition applicable to all cases may be conceived from the fact, that the disease varies greatly in its appearance in different instances; insomuch, that even fever is by no means invariably present; and, in rapid cases, death terminates their course, before a sufficient time has elapsed to admit of the formation of buboes and carbuncles.—Bateman, in Rees' Cyclopædia, art. *Plague*.

The INFRUCTIFERA, or uneruptive plague, where the eruption is imperfect or suppressed, transferred to some internal organ, or superseded externally by stigmata or vibices: and lastly, the ERYTHEMATICa, or erythematous plague, the body being covered over with trails of vesicular erythema, producing deep, sanious, and gangrenous ulcerations, which often occasion the loss of one or more limbs. Sir Arthur Brooke Faulkner also makes three varieties, the French physicians admit five, and Dr. Russel six: for my own part, I do not see the necessity of involving the subject in what appears to me such arbitrary divisions. That there are slighter, as well as severer forms of plague, as there are of most other diseases, one can have no doubt, but, as Dr. Brown very justly observes, there is every reason to think, that there is

no specific difference existing between well marked and decided cases of the disease.

Foderé⁽¹⁾ contends, that Egypt is the only natural locality for this disease; that it is there generated, and from thence it spread. Though this idea appears sufficiently fanciful, yet, there is no doubt that it is a disease that may be termed endemic to that country; with which view Tully perfectly coincides,⁽²⁾ at the same time acknowledging that our information regarding it in the earlier ages is imperfect, yet the true source, and common seat of the disease, appears to be universally attributed to Egypt. Thucydides considers that the great plague, which occurred at Athens four hundred and thirty years before the Christian era, commenced in that part

(1) Dictionnaire des Sciences Medicales.

(2) Tully's History of the Plague.

of Æthiopia which borders upon Egypt, spreading from thence into Egypt and Syria, subsequently raging in many of the neighbouring countries, particularly at Lemnos. Previous to its appearance at Athens, where it first shewed itself in the Piræus, Evagrinus⁽¹⁾ and Procopius, ⁽²⁾ in noticing the dreadful effects of this pestilential disorder, which spread its influence throughout the whole of the known world, for the space of fifty-two years, trace it from Pelusium (an ancient city, whose site was near the modern Damietta), from thence to Alexandria, Palestine, Constantinople, and so on to the whole of those countries which were unhappily subjected to its influence.

In the most rapid and intense form of the disease, the person affected is attacked

(1) *Historia Ecclesiastica*, lib. iv.

(2) *De Bello Punico*, lib. ii.

with sudden loss of strength, head-ache, confusion of ideas, giddiness, and oppression of spirits, and death hurries on sometimes in the short space of twenty hours, before there appears to those surrounding, the decided characters of dangerous illness; for if the febrile symptoms are but slightly developed, the disease is in its most urgent and worst form:—it would appear, that the functions of the system are so effectually annihilated, as to prevent a well-defined febrile accession. In this rapid form, death ensues before the buboes and carbuncles appear.

Others again, after having been attacked much in the above manner for a few hours, become very obviously disordered; the power of utterance is lost, or very much impaired; after a few flushings and febrile exacerbations, the body becomes cold, from which it does not recover; and from that the skin

passes into a clammy state; the eyes lose their lustre; the pulse becomes languid and weak; and the patient falls into a low, typhoid, delirious condition, which is succeeded by the closing scene of utter prostration, attended by drowsiness; the body often being covered by petechiæ and vibices, though rarely with buboes.

The slighter form has more the character of ordinary fever; the shivering, and the succeeding re-action are more marked; the stomach is disordered to vomiting, and this condition, unattended with any thing like coma, remains during the illness; the fever during the whole time never ceasing, though not unfrequently remitting. The buboes and carbuncles, in this milder form, generally make their appearance in a very early stage, sometimes even on the first day, and during the continuance of the malady, a succession of these eruptions takes place.

Generally speaking, the third morning is critical :—if a remission of the general febrile symptoms ensue, together with a free perspiration of the skin, a happy termination may be expected ; if, however, this should not be the case, but a dry, hot skin, drowsiness, quick small pulse, and a muddy glistening of the eye prevail, together with a low muttering delirium, and considerable jactitation, danger is to be anticipated ; this condition may continue for a fortnight, before the patient sinks.

This, however, as said above, is not the severest kind, there is another form, described by Dr. Russell, somewhat of the same character, which is much more fatal, beginning generally with slight shivering and sense of cold, and is soon succeeded by the usual symptoms of fever, accompanied by vomiting and purging. The fever increasing towards night, the face

becomes flushed, the eyes glisten, and the patient either becomes delirious, drowsy, or comatose: during the succeeding days, at every exacerbation, these symptoms increase, the pulse becomes rapid, and more or less full; the eyes have the peculiar and characteristic muddy appearance, with a confused wandering expression of countenance, together with pain of heat and oppression about the præcordia. From three to six days, is the period in which these symptoms generally run their course: the buboes make their appearance ordinarily on the second day; they, however, but rarely suppurate: experience has shewn that they do not influence the termination of this form, as but few recover from it.

The buboe, which forms so prominent a feature in all histories of the plague, is an inflamed glandular swelling, generally oc-

curring in the groins and axillæ ; besides, however, the inguinal and axillary, the parotid, the maxillary, and cervical glands are occasionally affected ; buboes but very rarely indeed take place in other parts :— at first deep seated, small and painful, they subsequently increase, approach the surface, and in some cases rapidly pass to a state of suppuration.

The carbuncle is an inflamed, tumified portion of cellular membrane, assuming generally a yellow appearance, it rapidly passes into a putrid, suppurative form, destroying the skin and surrounding parts, and occasionally involving the muscles and tendons in its ravages. The presence of these two eruptions, whether they occur separately or conjointly, leaves the nature of the disease unequivocal.

When the disease has arrived at a putrid state, another class of eruptions make their

appearance, which includes the PETECHIÆ, derived from the Italian word, *petichio*; being deep red, or purple spots, having some resemblance to a flea-bite. VIBICES, which are purple spots or weals, giving the body a mottled blue, or purplish appearance; and besides these, large blue or purple blotches, by some termed MACULÆ MAGNÆ.

In Egypt, the plague is said, according to Dr. Brown, to commence every autumn, and to prevail during the intervening months, till the beginning of June of the succeeding year: its ravages then cease, and its contagious character is extinguished, or remains in abeyance during summer, to be again called into existence or activity in the autumn. The vernal equinox is the period of the greatest fatality. Sir James Mc'Grigor, in his medical sketches of the expedition from India to Egypt, notices,

that the plague is subject to considerable varieties, in different seasons and circumstances. In the Indian army he observed, that when the disease first broke out, the cases sent from the crowded hospitals of the 61st and 88th regiments, were, from their commencement, attended with typhoid or low symptoms.

Those which were sent from the Bengal volunteer battalion, and from the other corps, when the army was encamped near the marshy ground at El-Hammed, were all of the intermittent and remittent type. The cases which occurred in the cold rainy months of December and January, had much of the inflammatory diathesis; and in the end of the season, at Cairo, Ghiza, Boulac, and on crossing the isthmus of Suez, the disease wore the form of a mild continued fever. Mr. Tully, in combating the opinion of another author, who is of the

same opinion as those above quoted, says, that season has nothing whatever to do with plague ; that the extremes of heat or cold⁽¹⁾ are neither of them to be relied upon as a means of checking the propagation of the plague in those countries subject to the disease ; and he refers to the progress of the malady within the last thirty years in Constantinople and Egypt, as offering abundant proof of his position. But Sir Gilbert Blane asserts the contrary of this ; that by the experience of ages, it is incontestably established, that the disease of the plague cannot co-exist with a heat of atmosphere above 80°, nor a little below 60° :—it never fails to disappear in Egypt at the summer solstice, the

(1) Of course this refers to the natural temperature of the atmosphere, otherwise it would be erroneous; as the recent experiments of Dr. Henry of Manchester, have shewn that an increase of temperature will destroy contagion.

heat being then pretty uniformly at 80° or upwards. Its chief prevalence, therefore, is in Lower Egypt. It is almost unknown in Lesser Egypt; totally so in Abyssinia, in Mecca, and the southern parts of Arabia.

The mortality attending this disease in modern times, yields a parallel record of as frightful amount, as the history of the disease does in the Sacred writings. In the plague of London, in 1625, thirty-four thousand died; at Marseilles, in 1720, forty thousand died; at Messina, in 1743, forty-three thousand were its victims; and according to the report of Desgennettes, little more than one-third of those, that were attacked of the French army that invaded Egypt, recovered.

Such is a short description of this appalling disease. It has been the lot of the present day, however, to witness one more terrific in its symptoms, more rapid in its

progress, and more fatal in its consequences: but amid all its horrors, one subject of proud congratulation remains to ourselves,—for while the nations, amongst whom the plague may be said to be endemic, although regarding its appearance as a direct visitation from heaven, yet, swayed by that mental indolence, that belief in fatalism, so peculiar to their character, consider the adoption of any measures for the purpose of arresting its progress, as a species of impiety; our own country has shewn itself under the severer infliction, willing to offer up prayers to the avenging God to avert the evil, and to prosper the industrious means of those striving for its prevention and its cure.

BOILS AND BLAINS.

OF the ten plagues of Egypt, but one, properly speaking, comes now within my province, though I could derive some advantage to my argument in pointing out, that each of them would tend to prove the truth of my positions, that these afflictions are of divine imposition, and that they have their origin in, and are subject to, the ordinary laws, to which diseases are said to be subject in the present day.

The sixth plague, which is the object of my attention at this moment, refers to the inflicting on the Egyptians the boils and the blains, which is thus described in our version. (1) ‘And they took the ashes of the furnace, and stood before Pharaoh, and

(1) Exod. ix. 10, 11.

Moses sprinkled it up towards heaven ; and it became a boil, breaking forth with blains,⁽¹⁾ upon man and upon beast.

“ And the magicians could not stand before Moses because of the boil ; for the boil was upon the magicians, and upon all the Egyptians.”

The Rev. Canon Rogers has favoured me with the following literal translation of the tenth verse : “ And they took ashes of the furnace, and stood before Pharaoh, and Moses sprinkled them before the sky, and they became cutaneous eruptions accompanied by inflammation, breaking out upon man and beast.”

Dathe renders the Hebrew of this passage by “ *ulcera tumercentia*. ” Rosenmüller and Le Clerc by “ *inflammatio pustulas* ”

(1) *Ελκη φλυκτιδες ἀναζέεσται.—Septuagint.

emittens," which, according to Geddes, is the literal and true rendering of the original: and he further says, that in Deuteronomy (¹) it is emphatically called the ulcer of Egypt, which is now generally supposed to be that species of leprosy called Elephantiasis. If, as Geddes affirms, the words in Deuteronomy do refer to the boils and blains, then I think there may be some slight grounds established for supposing it to be the Elephantiasis of the Arabians, otherwise the text is so short and indistinct, as to render it difficult to establish its identity, to say the least of it, with any particular class of diseases. But it does not appear to me so clear, that the verse alluded to in Deuteronomy, is in any way a context to the verses in Exodus now under consideration. The verse referred to

(1) Chapter xxviii. ver. 27.

runs thus: “The Lord will smite thee with the botch of Egypt, and with the emerods, and with the scab, and with the itch, of which thou canst not be healed.”

I cannot help thinking, on the contrary, that the verses relating to the boils and blains, bear an internal evidence of their not being a context to this verse of Deuteronomy, as well as their not referring, as Geddes supposes, to the Elephantiasis; for this disease is of slight origin, slow progress, incurable, and eventually crowned by a fatal termination; neither of which circumstances are to be assumed as belonging to this plague of Egypt, while the incurability of the disease alluded to in Deuteronomy, is a specific condition positively asserted.

The disease, to which I am somewhat induced to think that it refers, is the small-pox of the present day: the character of

which certainly agrees with the literal rendering of the text by Rosenmüller.

It is allowed by all authorities, that the small-pox is a disease of very early occurrence in Arabia, though there is much contradiction of opinion, as to whether it existed before the Mosaic æra, or not until the time when Mahomet was pursuing his conquests in the zenith of his power. Great names are to be found as asserters of both positions : for the latter view, Drs. Friend, Mead, and Gregory ; while for the former, Razès and Avicenna (by whom the disease has been accurately described), Salmatius, Hahn, Willan, and Dr. Baron of Gloucester, are strenuous supporters.

It is nevertheless very certain, that there is no mention of this disease, by name, in the earlier times :—*variola* and *pocca* first occur in the Berthinian Chronicle, of the date nine hundred and sixty-one, which

has induced Gregory to affirm,⁽¹⁾ that the world was made some thousand years before the appearance of this disease.

Dr. Mason Good, who ranges himself as one of those opposed to the small-pox having existed at the Mosaic æra, says, that it is "better certain that it existed in Asia, and especially in China, for an incalculable period before it was known in Europe."

Dr. Baron, after stating that an eruptive disease, common both to man and the inferior animals, has been known and described in different ages and different countries, and has also been described in the Bible, the earliest historical record in the world, says, that the descriptions given of this eruptive disease by various writers, accord

(1) Cyclopædia of Medicine.

so completely with what is acknowledged to be characteristic of small-pox, as to render it highly probable, that this disease actually existed at a much earlier period than is usually assigned to its origin; and upon his authority⁽¹⁾ we may also infer, that the small-pox was of the highest antiquity amongst the Eastern nations, and that it existed in China about one thousand one hundred and twenty-two years before the Christian æra.

Pere D'Entrecolles⁽²⁾ states, that some Chinese works that he had seen, speak of it as of the remotest antiquity; and Pere Du Halde affirms, that a goddess, under whose superintendence small-pox was placed, forms a portion of the Chinese mythology; and further, their learned men

(1) Vide Dr. Baron's Life of Jenner.

(2) Vide Condamine's Discourse on Inoculation.

believe, that it has existed in China for three thousand years.

Dr. Baron, to illustrate the early existence of this disease, quotes from Philo, the learned Jew, who lived in the first century, the following running paraphrase on the portion of Scripture in question, which passage is appealed to by Dr. Willan, as containing a lively and accurate description of small-pox. "Επειτα κονιορτὸς αἰφνίδιον επεγεχθεὶς, ἀνθρώποις τε καὶ ἀλόγοις γώις ἀγρίαν καὶ δυσαλθὴ κατὰ τῆς δορᾶς ἀπάσης ἐλκωσιν εἰργάζετο, καὶ τὰ σώματα εὐθὺς συνάδει ταῖς ἐξανθήσεσιν, ὑποπάνθετα ἔχοντα φλυκταίνας, ἃς ἐπόπασεν ὅν τις ἀφανῶς ὑποκαταρένας ἀναβεῖν, ἀλγηδόσι τε καὶ περιωδυνίαις, κατὰ τὸ εἰκὸς, ἐκ τῆς ἐλκώσεως καὶ φλόγωσεως πιεζόμενοι, μᾶλλον ἢ οὐχ ἡττου τῶν σωμάτων τὰς ψυκὰς ἔκαμπνον, ἐκτετρυχωμένοι ταῖς ἀναισ. Ἐν γὰρ ὅν τις ἀπὸ κεφαλῆς αχρὶ ποδῶν συνεχὲς ἐλκος ἐθεάσατο, τῶν κατὰ

μέλος καὶ μέρος διεσπαρμένων, εἰς μίαν καὶ τὴν αὐτὴν ιδέαν ἀποκριθέντων. (¹)

Dr. Baron says, “that as Philo wrote in the first century, Willan very fairly contends, that this disease must have been known as a specific malady in his time.” Of the accuracy of Dr. Willan’s opinion respecting the nature of the disease described by Philo, no competent judge can doubt; but it is a singular fact, that this description did not merely refer to a

(1) “Clouds of dust being suddenly raised, and striking against both man and beast, caused ill-looking ulcers over almost the whole skin; so that immediately an efflorescent eruption made its appearance on the surface of the body, which became swollen, and abounding with purulent pustules, and which you might almost think boiled in consequence of some hidden heat; but if they suffered thus much in body, they suffered more, or certainly not less, in mind, being oppressed and worn down with pain and anguish, as there appears reason, on account of the inflammation and ulceration. For, to one regarding those cases, in which the pustules were scattered over the bodies and limbs, and run together in one mass, it appeared as if they were a continued ulcer from head to foot.”

' malady known at the time Philo wrote,' but to one known many centuries before. His words apply to the plague of boils and blains, as recorded by Moses.

It is therefore evident, that if Philo's account be descriptive of the small-pox, it carries back the antiquity of that disease, not to the first century, but to the much more remote period of nearly fifteen hundred years before the Christian æra. And it is not unimportant here to remark, that the histories and traditions of the Eastern nations, particularly the Chinese and Hindoos, refer the commencement of this disease to a corresponding epoch.

It is not a little remarkable, when we bear in mind the Mosaic statement of the eruption of the boils and blains, following the casting of the ashes, that when, in the years five hundred and sixty-eight and nine, the small-pox broke out amongst the

Abyssinian army, under Abrahah, then besieging Mecca, that this disease was attributed “to an assault of pebble stones thrown from the beaks and talons of great birds.”

Such are the few crude observations I am willing to offer, upon the probability of this plague being identical with the small-pox of our own times; but I should not have gone thus far into the subject, upon such slight grounds, had I not thought that the argument is strengthened and borne out, by the still more ancient account that we have handed down to us, of the malady of Job. As this, however, comes under consideration in another place, I shall now proceed to give a very slight outline of the natural small-pox, as observed amongst us, which I should here have omitted, considering how familiar its symptoms are to all, had I not felt I should have occasion,

in another place, to point out some striking coincidences of period and symptoms.

Small-pox is a contagious phlegmasia, characterised by the presence of pustules of a peculiar description, developed generally in great numbers on all parts of the body, both preceded and accompanied by febrile symptoms, more or less severe. When the pustules are but few in number, and distinct from each other, it is called “discrete;” when they are in great abundance, and running into each other, “confluent:”—to whichever variety, however, it belongs, its progress is the same, and it has the same marked course, which is differently divided by different authors. Dr. Gregory makes but three stages, those of incubation, maturation, and decline; while Biet and others divide its progress into incubation, invasion, eruption, suppuration, and desiccation: but as these minute

discussions can be of no importance here, I shall not enter into them.

It is very difficult to decide *accurately* as to the exact period of incubation, for during the earlier stage, the patient affected is in perfect health, until the febrile attack, that precedes the eruption, becomes confirmed: about fourteen days is considered the average period, varying from six to twenty.

The febrile symptoms set in ordinarily by feelings of horror, lassitude, aching pains of the limbs, irritability of feelings, and impatience of conversation, heat of skin, quickness of the pulse; tongue white, red towards the point, &c., which symptoms are all exaggerated in the confluent variety.

After three days have elapsed, a slight eruption, resembling a flea-bite, makes its appearance, first on the neck and breast; and subsequently, perhaps after twenty-

four hours, similar eruptions appear on the extremities and other parts, which go on increasing in number and size.

Four or five days then elapse before the pustules arrive at the stage of suppuration, when they present a flattened surface, with a central depression.

In examining, on the second day of the eruption, the surface of the skin, we find a number of small elevations, with a red and inflamed base : at this period the papulæ, for they are scarcely perfect vesicles, have an acuminated head, which if touched by the point of a lancet, a little serosity exudes from them, and we may distinguish under the cuticle, a kind of semi-transparent lymph secreted.

On the following (third) day, the characteristic central depression takes place ; which character increases as the pustules progress to a state of suppuration.

Dr. Gregory⁽¹⁾ says, the papulæ have their seat in the true skin; and upon the third or fourth day from their first appearance, are converted into vesicles, containing a thin transparent lymph. These vesicles are very curiously organised, being divided into six or eight cells, tied together in the centre, which, for several days, is depressed. This central depression, or umbilicated form of vesicle, is very characteristic of small-pox. The specific matter, or poison, is secreted by the parietes of the minute cells; and the progress of inflammation in the papulæ is denoted by the inflammatory circle called *areola*, which, about the fourth day, begins to surround it. As the colour of the arcola changes to a bright crimson, the lymph in the vesicle is converted into a thick opaque matter, of a white or straw colour. This distends the cells, and gra-

(1) Cyclopædia of Medicine—*Art. Small-pox.*

dually increasing in quantity, breaks down the central band, in consequence of which, the pustule acumulates. In favorable cases this process is usually completed in seven, or at farthest in eight days; occasionally it occupies only five or six days.

During this maturing of the vesicles, there is generally some fever present, which of course depends on the constitution of the patient, the number of pustules formed, &c.

About the fifteenth day the suppuration takes place, which is attended by what is termed the secondary fever, accompanied by a general tumefaction of the surface.

The period of suppuration continues for four or five days, when desiccation commences; the febrile and other disagreeable symptoms gradually cease, and with the exception of the cuticular deficiency, the patient is recovered.

BOTCH.

IN a former place, where I endeavoured to shew, that the opinion of those, who esteemed the boils and blains as a disease identical with the Egyptian Elephantiasis, was incorrect, I further observed, that a confirmation of my views was discoverable in the few words that are said in Deuteronomy, respecting what is there termed, the BOTCH.

The words to which I refer are; “The Lord will smite thee with the botch of Egypt, whereof thou canst not be healed.”⁽¹⁾

“And the Lord will smite thee in the

(1) Deuteronomy xxviii. 27.

knees, and in the legs, with a sore botch, that cannot be healed, from the sole of thy foot to the top of thy head.”⁽¹⁾

The literal translation, according to Canon Rogers, is, “Jehovah will smite thee with the ulcerous disease of Egypt, which cannot be cured.

“Jehovah shall smite thee with a severe ulcerous disease, in the knees and in the legs, which cannot be cured, from the sole of the foot to the crown.”

I pointed out, when speaking of the boils and blains, that there was not a word said as to its incurability, which we find so expressly stated in the above description of the botch; and which circumstance I then offered as an argument, why the Elephantiasis was not to be considered the disease there referred to.

It is not a little singular, that this malady

(1) Deut. xxviii. 35.

still enjoys, as a mark of specific distinction, the epithet of Egyptian, by which it is so forcibly described in the Sacred writings; and in another place I have quoted the words of Lucretius, to shew that this disease was considered as having its origin on the banks of the Nile, in the centre of the kingdom of Egypt: and thus Pliny also observes, “ad postremum vero nigrescente, et ad ossa carnes apprimente, intumescentibus digitis in pedibus manibusque.”⁽¹⁾

Boothroyd, in his note on the thirty-fifth verse, says, “that it contains a correct description of the Elephantiasis,” and adds, “that as no cure has been discovered for this disease, it agrees perfectly with the description of Moses.”

I shall not deviate here from the mode that I have pursued, in the preceding pages,

(1) Pliny, Hist. Naturalis, lib. xxvi. cap. 1.

of strengthening my position, by giving the modern general history of the disease as described by medical authors.

Elephantiasis Arabica aut Egyptiaca, may be thus defined, “ Skin thick, livid, rugose, tuberculate : tubercles chiefly on the face (especially forehead) and joints, insensibility of feeling, fall of hair excepting from the skalp, perspirations offensive, eyes fierce and staring, voice hoarse and nasal.”

I have said so much in former pages about the confusion that has become established in the histories of this and other diseases, that it renders it unnecessary to meet the question here ;—I shall, therefore, confine myself to a short description of the disease.

It commences gradually, occasionally, a few years elapse before the health becomes disordered ; the first symptom is generally a slight eruption, which shortly shews itself to

be of a tubercular character ; it most commonly first attacks the alæ of the nose, the pendula of the ears and the face, occasionally but little altered from the natural colour and general appearance of the skin : — after remaining some months in this apparently indolent condition, a new action takes place, when they ulcerate and discharge, in small quantities, a fœtid ichorous humour, but never a healthy pus.

The features swell, and the face generally speaking enlarges greatly, and the forehead becomes as it were inflated and overhanging, giving a ferocious and very peculiar expression of countenance, bearing a resemblance to that of a lion, which has induced some of the Greek writers to term the disease “ Leontiasis.”

Dr. Joy⁽¹⁾ says very justly, that “ one

(1) Cyclopædia of Medicine.

of the most accurate descriptions of the disease is that by Dr. Kinnis, who saw several cases of it in the Isle of France. The face was generally swollen, with large tubercles on the forehead, separated from each other by deep furrows; and smaller and more confluent ones on the cheeks, which occasionally hung down, so as to depress the angles of the mouth; the alæ of the nose were dilated, distorted, and covered with tubercles; the ears thickened, enlarged, and studded with similar substances, and the lips penetrated by hard whitish bodies, which looked somewhat like recent cicatrices. In mulattoes the tubercles were of a light livid, or copper colour, and in blacks a shade deeper than the surrounding skin. The cuticular lines and folds were every where more distinct and larger than natural. The deeply-wrinkled forehead, the bare swollen eye-

brows, the heavy pendulous cheeks, the irregular expanded nose, the depressed mouth, and the thickened elongated ear-lobes, combined to render the whole visage singularly harsh and uncouth."

The hair of the eye-brows falls off, as also that of the beard and surface of the body generally, with the exception of the hair of the capillitium.

Dr. Heberden, who gives a very circumstantial history of the disease, says he never saw one affected, who did not retain the hair of the head.

In the more advanced cases, the nostrils become patulous, and affected with ulcers, which involving the cartilages and alæ nasi, occasion the nose to fall. The lips are tumid, the voice is hoarse, which symptom has been observed when no ulcers have appeared in the throat, though this is sometimes the case both with the throat

and gums. The nails grow scabrous and rugose, appearing somewhat like the rough bark of a tree; and the distemper advancing, corrodes the parts generally with a dry sordid scab, or gangrenous ulcer, so that the fingers and toes rot, and separate joint after joint.

Hence⁽¹⁾ we find the Arabic name is not *Elephas*, or *Elephantiasis*, but *juzam*, literally “disjunction, amputation;” but it is vulgarly, and more generally indeed, written and pronounced *judam*, a root which imparts “erosion, truncation, excision,” evidently as Dr. Good justly observes, referring to the destructive character of the disease, and the spontaneous separation of the smaller members. It is thus denominated, not only in Arabia, but also in Egypt, Persia, and India⁽²⁾.

(1) Good, vol. iii. (2) Dr. Joy.

In some patients the legs have so far lost their character, both as to size and form, as to appear more like posts than otherwise; being no longer of the natural shape, but swelled to an enormous size and indurated, not yielding to the pressure of the fingers, the surface covered with very thin scales of a dull whitish colour, seemingly much finer, but not so white as those observed in the Lepra Græcorum⁽¹⁾. The whole limb is overspread with tubercles, interspersed with deep fissures: sometimes the limb is covered with a thick, moist, scabby crust, and not unfrequently the tumours ulcerate. In others the legs emaciate, and sometimes ulcerate; others again are affected with tubercles without ulceration. The fleshy

(1) If I do not mistake, some confusion of terms in this respect has arisen in the Cyclopædia of Medicine.

parts between the thumb and fore-finger are generally extenuated.

The whole skin, particularly that of the face, has a remarkably shining appearance, as it were varnished or finely polished. The sensations in the parts affected are very obtuse, or totally destroyed; so that pinching, or puncturing the part, gives little or no uneasiness. Dr. Joy says, however, it is rarely abolished; though generally diminished.

The flexures of the joints, and the trunk of the body, are parts that are rarely affected.

The mental powers do not suffer in any great degree; sleep, however, is disturbed by unpleasant dreams, and the manners are generally of a morose and forbidding character.

The progress of the disease is very slow, nor does death put a period to a wretched

existence, till the sufferer has become deformed and disagreeable to look at, as he dies literally by inches.

Dr. Henderson thus sums it up: “ In its primary stage, its symptoms are inconsiderable. A small reddish spot, scarcely larger than the point of a needle, breaks out at first about the forehead, nose, corner of the eyes, and lips ; and in proportion as it increases, other pustules make their appearance on the breast and arms, which generally dry up in one place, and break out in another without pain, till the disease has considerably advanced, when they cover almost the whole body, give the skin a scabrous appearance, stiffen it sometimes in shining scales, which fall off like dust, sometimes in malignant tumours and swellings. The patient in the meantime labours under lassitude of body, anaesthesia, and lowness of spirits.” “ This miserable pro-

gress," says Dr. Good, "is nearly a transcript of the description thus given. The patient is so worn out with fatigue and melancholy, as to be often tempted to make away with himself. He surrenders one part of the body after another to the insatiable malady, 'till at length,' as Dr. Henderson concludes⁽¹⁾, 'death, the long wished for deliverer, comes, and puts an end to his misery.'"

(1) *Journal of Residence in Iceland.*

BLINDNESS.

IN the same chapter, as well as in other parts of the Sacred writings, a failing and blindness of the eyes is mentioned, which most commentators have interpreted, not as a literal, but figurative expression. Dr. Gill says, “it is a blindness, not of body, but of mind ; a judicial blindness.” I am inclined to take it, however, in a literal meaning, not only because it is placed in this chapter amongst the diseases and miseries that are enumerated as being a portion of that full measure of curses to be inflicted on the disobedient, or in other words, the imposition in this case of bodily blindness as a judicial punishment, but because such a reading of the text is borne out by our knowledge of the fact, that a

" failing of the eyes and blindness" are of frequent occurrence in Egypt, in consequence of the frequency of ophthalmia. Sir James M'Grigor, in his Medical Sketches, says that the ophthalmia of Egypt is next in importance to the plague, and though a less fatal, is a more distressing malady.

In Egypt at particular⁽¹⁾ seasons, it is a generally prevailing disease. It is not confined to the human race; the animals of the country, particularly the dogs and camels, are subject to its attacks. Travellers (and if I remember, Volney is one) describe the same disease as prevailing in Syria;⁽²⁾ and, I am informed by my

(1) Medical Sketches of the Expedition to Egypt from India, p. 146.

(2) "And when he came down to him, Elisha prayed unto the Lord, and said, smite this people (Syrians) I pray thee, with blindness. And he smote them with blindness, according to the word of Elisha.

friend Dr. Short, that in Persia, ophthalmia is a most frequent and severe disease. In Egypt this disease proved most distressing and obstinate. The French, it was said, sent from Egypt to France one thousand blind men." I have quoted the above to shew, that it is of universal occurrence amongst those Eastern nations which are the subject of Mosaic history.

The Egyptian ophthalmia, then, with which we have become so familiar, since the visiting of Egypt by our troops, is an inflammatory condition of the conjunctiva, or lining membrane of the lids and globe of the eye, acquiring rapidly a purulent secreting surface.

Dr. Vetch says, that the first symptom is an inflammation of the lining membrane of the lower eye-lid, which assumes first a mottled appearance, and then a fleshy redness. A little mucus is generally present

at the doubling of the conjunctiva, at its lower part.

In this state it may remain for twelve hours, or perhaps longer, before it invades the conjunctiva covering the eye. The progress of the inflammation, when it extends from the conjunctiva of the eye-lid to that covering the globe of the eyes, is often so rapid as to elude any distinct observation ; but frequently it advances more gradually, preserving a defined line, till it extends over the whole membrane, as far as the cornea. “ The disease is often thus far advanced, before the attention of the patient is so much excited as to make him complain ; a certain degree of stiffness being sometimes the only sensation which accompanies it. The first, and chief uneasiness in this stage of the disease, is described as arising from the feeling of sand or dirt rolling in the eye. This sensation

is not constant, as it comes on suddenly, and as suddenly departs, confirming to the patient the idea of something extraneous being lodged in the eye."

A swelling of the eye-lids coming on as the disease advances, reduces the patient to a state of great uneasiness from the irritation it causes, and by its confining the discharge, he begins now to suffer attacks of excruciating pain. The description of Dr. Frank, who thus characteristically expresses himself, forcibly depicts the painfulness of this disease. "I have seen," says he, "the bravest soldiers cry like children for a whole night, and they would readily allow the affected eye to be torn from its socket if they could hereby get rid of the pain."⁽¹⁾

The swelling of the eye-lids, and accompanying pain, are the symptoms which

(1) *De Peste, Dysenteria, et Ophthalmia Ægyptiaca.*

chiefly indicate the mischief that is going on, and from which the patient must be immediately rescued, in order to save the organ; for the disease now soon attacks the cornea, which, if not prevented, ulcerates and sloughs, so that not only the function, but the form of the eye is destroyed.

On the remaining diseases that are mentioned in this chapter⁽¹⁾, I shall not dwell long:—they are enumerated chiefly in the twenty-second and twenty-seventh verses, which in our version run thus: “The Lord will smite thee with a consumption, and with a fever, and with an inflammation, and with an extreme burning, and with the sword (drought), and with blasting, and with mildew, and they shall pursue thee until thou perish.”⁽²⁾

(1) Deuteronomy, chap. xxviii.

(2) Πατάξαι σε Κύριος ἐν ἀπορίᾳ, καὶ πυρετῷ, καὶ δύγει, καὶ ερεθισμῷ, καὶ ἀνεμοφθορίᾳ, καὶ τῇ ὥχρᾳ, καὶ καταδιώξονται σε ἕως ὃν απολέσωσι σε.

"The Lord will smite thee.....with the emerods, and with the scab, and with the itch, whereof thou canst not be healed."⁽¹⁾

Scheuzer esteems the whole of the diseases enumerated in the twenty-second verse, as referable to an inflammatory class; and that which is rendered in our text, by consumption, he assumes to be the true plague, with its characteristic bubo, to which, a few former pages since, we addressed ourselves. For my own part, I can see neither grounds for assent, nor dissent to this opinion of the above-named commentator: consumption, by which it is anglicised, is certainly a very different disorder, so that, if Scheuzer be right in his conclusions, our rendering must be exceedingly incorrect.

(1) Πατάξαι σε κύριος ἔλκεῑ Αἰγυπτίω εἰς τὴν ἔδραν,
καὶ ψώρᾳ ἀγρίᾳ, καὶ κνήφῃ, ὥστε μὴ δύνασθαι σε
ἰαθῆναι.

The second disease enumerated in this verse, is interpreted, by Sarchi and Aben Ezra, to refer to that species of erisepelatous inflammation of the face, commonly known by the term of St. Anthony's fire; the generality of commentators, however, are rather inclined to suppose, that it refers to the common continued fever.

There can be no doubt, at least there is none in my mind, that the “inflammation” of our version, which is the next disease named, refers to the ague. Saadias in very distinct terms assumes it to be a quartan fever, and an argument in support of such a conclusion may be offered, (when we take into consideration, how conventional the meaning of the Hebrew words is, and how very much a just interpretation depends on the understanding the radicals and corresponding words of the languages

of neighbouring countries) (¹), in the fact, “that an Ethiopic word of the same origin denotes to “tremble,” and another derived from it “an earthquake,” which, when we bear in mind the peculiar symptoms of ague, gives ample grounds for the supposition, that it may be the disease; and Boothroyd, whilst he allows the difficulty of ascertaining the peculiar disease to which the word refers, yet observes, that there is sufficient ground for such a supposition. The curious occurrence of the word “*πυγελ*” in the Septuagint, and “frigore” in the Vulgate, while in our own, as well as in most of the translations, the word “inflammation” is used, and its being rendered by words of parallel signification so opposed, in

(1) Qui morbi in lingua Latina, aut Germanica his nominibus morborum Hebraicis respondeant *nemo tertio dixerit*. Conjecturæ ex verborum origine retitæ incertæ sunt.—DATHE.

the abstract, to the rendering of the Septuagint and Vulgate, evidently points out a just ground, if not for the conclusion, at least for the supposition, that the original Hebrew word comprehends that morbid condition of the system signified in our term ague, which is characterised by its hot and cold stage.

Of the “extreme burning” ($\epsilon\rho\epsilon\thetaισμ\hat{\omega}$) I have nothing particular to offer. Rosenmüller says, he has no doubt of its being a catarrhous suffocation, *nomen habens a ronchissando*. Geddes acknowledges he is uncertain to what disease it refers, but supposes it to be an inflammation.

Instead of the “sword” in this verse, the Vulgate, Arabic, and Samaritan texts as well as Aben Ezra, render “droughts,” and as it is classed with other calamities affecting the fruits of the earth, this is probably its meaning: Canon Rogers, however, prefers our common version.

The remaining diseases alluded to in this chapter, are the “*EMERODS*,” which are generally allowed to refer to that frequent affection of the hæmorrhoidal vessels, called piles, an interpretation to which both Dathe and Taylor give their assent. (¹)

The “*SCAB*,” and the “*ITCH*,” are translated by Dathe porrigo and scabies; Taylor says, that the former refers to a malignant disorder of the skin. The mention of these diseases, however, is so slight, that any discussion on them would be futile.

Of the madness here named, I shall say nothing at present, as the subject will come somewhat under illustration in the next object of my inquiry.

(1) This receives some support from 1 Samuel vi. 5, as the golden models there named, most probably represented the protuberances occurring in this disorder.

DEMONIACS.

HAVING now taken this short view of the more important diseases of the Old Testament, it remains for me to say some few words concerning the demoniacs of the New, or as our version expresses it, those possessed with devils.

Before entering on any illustration of the subject, it will be necessary to place on a right footing the true expressions of the original regarding this matter.

It will be found, by comparing the Greek text with the authorised version, that we have translated the two words, $\Delta\mu\beta\omega\lambda\oslash$ and $\Delta\mu\omega\nu\iota\omega\nu$, or $\Delta\mu\omega\nu\iota\omega\nu\es$, by the same English word, namely, “ Devil,” while, it is very

evident, if we bear in mind the conventional meaning of the former word, we shall find, by confounding it with the latter, that considerable misapprehension has arisen :— $\Deltaιάβολος$ ⁽¹⁾, justly rendered in our translation, by the term Devil, has a variable and extensive meaning, but certainly one in no way referable to that which is to be understood by the original words $\Deltaαιμόνιον$ ⁽²⁾ and $\Deltaαιμονες$.

$\Deltaιάβολος$ signifies a calumniator or accuser, and, in which restricted sense, is applied as an epithet to Satan ;⁽³⁾ in its figurative

(1) Calumniator, Diabolus, Satan. Th. $\deltaιαβαλλω$, traduco.

(2) $\Deltaαιμονιον$, Dæmonium, i. e. Spiritus impurus, Dim. a $\Deltaαιμων$, q. r. Deus, Genius, Dæmon; apud sacros scriptores, tametsi $\muέσον$ in malam partem accipitur, pro spiritu impuro : $\Deltaαιμόνες$, pl. Dæmones.

(3) Τότε ὁ Ἰησοῦς ἀνήχθη εἰς τὴν ἔρημον ὑπὸ τοῦ πνεύματος, πειρασθῆναι ὑπὸ τε διαβόλου. Matt. chap. iv. verse 1.

sense it is an epithet for a wicked man ; (¹) but in the original Greek, this word is never applied to those said to have been possessed, while in this sense, according to Farmer, the word *δαιμόνιον* occurs in the Gospels fifty-two times ; *δαιμων*, three ; and *δαιμονίζομαι*, thirteen ; therefore, it seems evident, that all these passages would have been better translated, if they had been rendered by the word demon, or demoniacs. With this little explanation, I shall now endeavour to shew, in as short space as possible, what we are to understand by demoniacs, or the being possessed by demons, premising as an apology for the cursory manner of treating so very interesting a subject, that it has been amply

(1) Ἀπεκρίθη αὐτοῖς ὁ Ἰησοῦς, Οὐκ ἐγὼ ἴμᾶς τοὺς δωδεκα ἐξελεξάμην, καὶ ἐξ ἴμῶν εἰς διάβολός ἐστιν. John, chap. vi. verse 70.

and learnedly discussed by Mede, Sykes, Lardner, Mead, Farmer, &c.

It appears from many circumstances, that the expression of being possessed by demons, (¹) is by no means to be taken in a literal, but on the contrary, in a figurative sense; so that the true condition of the demoniacs was lunacy. That there may be no difficulty in understanding that no supernatural or miraculous agency is inferred, it will be well to bear in mind, what Lightfoot states, (²) that “the Jews attributed some of the more grievous diseases to evil spirits, especially those wherein either the body was distorted, or the mind disturbed,” to which latter case, the qualification of being possessed, solely referred; thus including mania and epilepsy.

(1) *Δαιμονιζομαι*, à Demonio vexor.

(2) Lightfoot on St. Matthew, xviii. 15.

We must also bear in mind, that it is not only in the Sacred Writings, and amongst the Jews, that this figurative language is employed, for the Greeks, whose language was then generally spoken, as well by Jews as other persons, used, and had long used, in their ordinary writings, the word demon, and they esteemed “rage and phrensy as the usual attendants of inspiration and *possession*, expressing by the same word, the being mad, and having a demon. The higher degrees of rage and distraction, are expressed by a term borrowed from evil demons :—nay, possession by demons, or by evil demons, is often used by them to express madness, whether this disorder proceeded from demons or not :”—thus Herodotus says, “ Ἡμῖν δὲ καταγελάτε ὡς Σκύθαι, ὅτι Βακχεύομεν, καὶ ἡμέος ὁ θεὸς λαμβάνει νῦν ὄντος ὁ δαίμων καὶ τὸν ὑμέτερον βασιλέα

λελάβηκε, καὶ Βακχεύει, καὶ ὑπὸ τοῦ θεοῦ μαίνεται. (¹).

The verb δαιμονιάω signifies according to Suidas ὑπὸ δαιμονος κατεχεσθαι, και μαίνεσθαι, to be possessed by a demon, and to be mad ; and in like manner many other authors interpret it; which become powerful arguments in favour of the view I here advocate, when we bear in mind, that this portion of the Holy Scriptures was written originally in Greek ; for surely there is no reason to suppose, that, at the same period, opposite meanings should be attached to the same word, or that our Saviour and the Evangelists, would use words in any other sense than their common acceptation ; indeed there is internal evidence to this effect,

(1) " You Scythians censure us on account of our Bacchanalian rites, when we yield to the impulse of the Deity. This same *Deity* has taken possession of your sovereign ; he is now obedient in his service, and under the influence of his power." Herod, lib. 4.

as “the Sacred writers have not particularly explained the sense in which they use the word demon. Now is it not a natural inference from hence, that they use this word as they do all others, in its common and ordinary signification? If they had assigned a new and peculiar meaning, would not they have given us notice of their doing it?”⁽¹⁾

“The pious and profoundly learned,” Mede, in his sixth discourse devoted to the consideration of this subject, says, that “he makes no question, but that, now and then, the same befals other men, whereof I have experience myself, to wit, to marvel how these demoniacs should so abound in and about that nation, which was the people of God; (whereas in other nations and their writings, we hear of no such

(1) Farmer.

thing), and that too as it should seem, about the time of our Saviour being on earth only, because in the time before we find no mention of them in Scripture. The wonder is still greater, because it seems, notwithstanding all this, by the story of the Gospel, not to have been accounted then by the people of the Jews, any strange or extraordinary thing, but as a matter usual; nor besides, is taken notice of in any foreign story."

To meet with all these difficulties, he is persuaded that these demoniacs are no other than madmen, and that the cause of any mistake, should it arise, must be attributed to the misinterpretation of the word employed, for all persons whose minds were deranged, were considered by the Jews as possessed by evil spirits, and named the *δαιμονιζομενοι*.

The grounds Mede has for his opinion

are fully stated ; he derives them, in the first place, from the internal evidence afforded by the Scriptures themselves, considering in the text “ He hath a devil (demon), and is mad,”⁽¹⁾ that the latter part of the sentence is an explanation of the former ; and in the second, by a reference to contemporary history, whereby his argument is strengthened.

Besides the general symptoms of those who were “ possessed ” agreeing with the general character of madness and epilepsy, we are expressly told, that “ madness is one of the curses imposed by the wrath of the Almighty on his people (vide Deut. xxviii.) for their sins ; and deliverance from it is not the least of the miracles performed by Christ. Saul was mad, and was cured of melancholia by the music of David’s

(1) *Δαιμόνιον ἔχει, καὶ μαίνεται.* John x. 20.

harp, and it is evident that insanity was then of common occurrence, since David himself, when beset by his enemies, changed his behaviour before them, and feigned himself mad.”⁽¹⁾

(1) Burrows on Insanity.

HAVING now spoken of the diseases more generally alluded to in the Sacred Writings, it remains for me, in pursuance of my object, to say some few words on the examples held out to us of individual affliction.

THE DISEASE OF JOB.

From our earliest recollections a degree of interest is excited by the history of Job; so graphically detailed is the extent of his sufferings, and so beautifully described is his patience under them.

But this charm has not been a little lessened by a discussion, in which some have (vainly to my idea, both as to purpose and result) engaged, as to whether we are

to suppose such a person ever existed; whether we are to view this beautiful episode of the Holy Scriptures as a mere fable, or wandering fancy of an inspired historian.

The conclusions to which Hugo Grotius arrives, appear to me to be fully sustained: that Job was a real person,—that his sufferings and patience are a portion of his history,—but that, according to the custom of the times, it is poetically described.

As to his having existed, the reference to this book in other parts of the Sacred Writings, affords, in my estimation, no opportunity for doubt upon the question.

Job, then, the subject of the present inquiry, is described as upright, perfect, and one that feared God, of great wealth, the proud father of seven sons and three daughters, and an inhabitant of the land of Uz.

According to Fredericus Spanhemius, (¹) Uz is situated in the northern part of the desert of Arabia, towards Euphrates and Mesopotamia. Henry in his commentary says, that it appears to have been the land of Idumea, or part of Stony Arabia, on the south-east of the tribe of Judah,—the term the east, being applied to the whole region between Egypt and the Euphrates.

There are some circumstances connected with this book, which are involved in considerable obscurity; the chief of which are, as to when, and by whom, the book was written. It is, however, generally esteemed as the most ancient of all the Sacred Writings, for it bears internal evidence of having been written before the time of Moses; though there are some that esteem it written by Moses, or during his

(1) *Historia Jobi*, cap. iv.

æra, and some have even judged it of later date; but the total absence of all reference to canon law, or to the Children of Israel, their sojourn in Egypt, their passage through the wilderness, must carry with it an argument of its earlier date.

Lightfoot conjectures it to have been written by Elihu, and Dr. Mead agrees with him. There appears to me, however, little else to be said on the subject, but what one can glean from the book itself, and then the conclusions arrived at, will be for the most part but presumptive. Some have thought, that an argument for its very early date, might be deduced from a slight allusion which Job makes to an idolatrous worship of the sun and moon, which in early times was customary amongst the neighbouring Chaldeans and Phœnicians.⁽¹⁾

(1) Chapter xxxi.

The settling of this point would be to me a matter of great interest, as proving the disease, which I am inclined to believe Job was afflicted with, is of very early date.

I shall conclude the consideration of this question, by quoting the summary of arguments offered by Henry and Scott.⁽¹⁾ “ Many have considered the most likely period to have been a short time before the departure of the Israelites from Egypt. Accordingly, the usual Bible chronology, upon the system of Usher, dates his trial about, B. C. 1520, twenty-nine years before the Exodus; but Hales and some others, consider that he lived at a still earlier period.

“ The arguments by which the latter one is supported, are as follows:—There

(1) Commentaries on the Bible.

is no mention of any events relative to the deliverance of the children of Israel from Egypt; the silence respecting the destruction of Sodom; the long life of Job, extending to more than two hundred years; the manners and customs are those of the ancient patriarchs; Job was priest in his own family; the only kind of idolatry mentioned is the worship of the sun, moon, and host of heaven, and is here noticed as a novelty, deserving punishment; the language and style of expression, used in this book, savour of greater antiquity than any other book of Scripture. Dr. Hales has an astronomical argument, founded on chapter ix. verses 9, 38, 31, 32, from which he places the period of Job's trial, B. C. 2130."

We are left totally in ignorance as to the period of life in which Job was afflicted, or to what age he lived, though

we are told he survived one hundred and forty years after his sickness, which of course allows us to presume he lived to a patriarchal age.

We must, however, turn to the immediate consideration of the subject. We find, according to the history handed down to us, that he suffered many external injuries, such as the loss of his children, property, &c., which we know subject a man to that condition of mind which makes disease tell upon the constitution—that he was then afflicted by sore boils from head to foot; (¹) and so much was he disfigured by the disease, that his friends did not recognise him; that they then remained with him for seven days and nights, during which time they did not address him, for

(1) *καὶ ἐπαισε τὸν Ἰὼβ ἐλκει πονηρῷ ἀπὸ ποδῶν ἔως κεφαλῆς.* Chap. xi. verse 7.

his pain was so great, and his restlessness so much increased, that he spake in wailing.

“ When I lie down, I say when shall I arise, and the night be gone, and I am full of tossings to and fro unto the dawning of the day.

“ My flesh is become clothed with worms and clods of dust, my skin broken and become loathsome.”

In another place he says, that his wounds are multiplied, that a mark is set upon the heels of his feet, that he is as a rotten thing, consumed as a garment that is moth-eaten.⁽¹⁾ That he is filled with wrinkles, which are a witness against him, and that his leanness rising up bears witness to his face.⁽²⁾ That he is a by-word to the people, that his eyes are dimmed by reason

(1) Chap. xiii. 28.

(2) Chap. xvii. 6, 7.

of sorrow, and that all his members are as a shadow, and that his bone cleaveth to his skin and to his flesh :⁽¹⁾ and he further complains, that he is subjected to the antipathy of his wife and children, and the people in general. ⁽²⁾

The concluding verses of this beautiful history, than which, Mr. Good says, nothing can be purer than its morality; nothing sublimer than its philosophy; nothing simpler than its ritual; nothing more majestic than its creed; detail the restoring of Job to his health and to his prosperity, though the time is not absolutely specified; yet by inference, we may judge that his convalescence from the severe malady he had laboured under, was but the work of a few days.

Dr. Mead, in his observations⁽³⁾ on the

(1) Chap. xvii. 6, 7. (2) Chap. xix. 20. (3) *Medica Sacra.*

subject before us, states decidedly the disease to be Elephantiasis, but he has not given what he understands to be the symptoms of Elephantiasis, nor has he shewn in any way that there is an identity of morbid character.

For my own part, I do not think it probable that it could have been this peculiar disorder, it certainly is not in unison with the description of the Elephantiasis that I have elsewhere detailed. In Job's history we have a sudden accession of disease, which in its very commencement is appalling: we have, after a severe continuance of a few days, a cessation of its symptoms, during which period a thinning of the members, till they are as a shadow, and a wrinkling of the face, supervene, and ultimately a speedy cure, none of which circumstances are characteristic of the Arabian Elephantiasis.

In pursuance of my plan, it now becomes necessary to examine if there be any disease of the present day, to which the general characters of Job's malady may be referred. Without doubt, one must expect some obscurity of detail to exist in an account like that portion of the Sacred history under consideration; but there is, notwithstanding, a disease of frequent occurrence in the present day, the symptoms of which, for the most part, present some remarkable coincidences—the disease to which I refer is the **SMALL-POX**.

Independently of the accordance of symptoms, there is evidence, as I have elsewhere shewn, of this disease having occurred in the remotest times, an opinion which is sustained “by a number of strong arguments and very curious considerations; by the mythology, the religious institutions, the sacred and historical records, the

medical works, and the uniform traditions of these Eastern countries."

The coincidences to which I allude are shortly stated, and which, on reference to what I have said in the chapter on the boils and blains, will be seen to be peculiarly striking. I there mentioned the suddenness of attack of the disease, and that seven or eight days was the severe period, or that of maturation; a similar sudden accession, and a similar time is here specified, in which Job's friends sat without speaking to him in consequence of the painful condition they saw he was in, for "his grief increased exceedingly, his boils became more intolerable, and there was no speaking to him, until he was a little at ease, and more composed and capable of alluding to what might be said."⁽¹⁾

(1) Gill, vol. iii. p. 205.

The swollen condition of his face, the falling away of his limbs, and speedy recovery, are all circumstances favourable to the idea, that Job's malady was small-pox; at any rate, they are in direct opposition to the symptoms of the other more common diseases of Arabia.

THE DISEASE OF KING SAUL.

THE disease of King Saul does not appear to have been spoken of in the Scriptures as a true madness (in the vulgar acceptation of the word), not what is elsewhere understood by the being possessed of a demon;(¹) but a “melancholia” occasioned

(1) 1 Sam. chap. xvi. v. 10.—Ex hoc versu plane apparent quam late dixerint Hebraei *Spiritum Jovæ*. Nam sub hoc

by the severe reverses of his fortunes; therefore we are told, after these are detailed, that an evil spirit from the Lord troubled him, for the cure of which his servants recommended his listening to the playing of “a cunning player on the harp,” and it appears that Saul, being fully sensible of his condition, acquiesced in the suggestion of his servants; and we further find the result of David’s playing to be, that Saul was refreshed and was well, and the evil spirit departed from him. But if we look at the previous and subsequent history of Saul, and bear in mind that, in

spiritu non dæmonem aliquem qui Saulum obsiderit, esse intelligendum, docet remedium, quod aulici suadent adhibendum. Musica non expellitur dæmon, sed aminus tristis ea adhibita potest exhilarari. Ex cantatione quadam, quæ hymnorum recitatione facta sit, expulsos dæmones qui Saulum vexassent, figmentum est Josephi ex opinione Judæorum si temporis de magna dæmonum vi in homines.—DATHE.

the present day, melancholia is considered as a true madness, we find that Saul was in every respect worthy from his actions the epithet of madman.

A recent writer⁽¹⁾ observes, that maniacal aberration exhibits itself under the three great forms, of the furious, the gloomy, and the idiotic, and that these distinctions correspond with the mania, melancholia, amentia, and fatuitas of nosologists. This, although but a popular subdivision of the complaint, is certainly superior to that which the old pathological writers chiefly dwelt upon ; they assumed the extent of maniacal aberration as destructive of the species, and the term melancholia was made to bear a reference, not to the concomitant dejection and despondency, but to the limitation of the diseased condition of mind to a few objects

(1) Dr. Gregory.

or trains of ideas; but with Dr. Uwins, I may here observe, that I do not attach much value to the kinds and shapes as marked out by authors.

The mania⁽¹⁾ of King Saul appears to partake of the furious and gloomy, though not confined to any specific hallucination. Dr. Burrows says,⁽²⁾ that a patient under these circumstances, “manifests great susceptibility and nervous agitation, lowness of spirits and groundless apprehensions, is anxious about trifles, sighs deeply, and perhaps sheds tears; he falls into long reveries, with a look fixed on vacuity, neglects all former pursuits, seeks solitude, and spurns intercourse with his

(1) “Now to me it appears manifest, that this king’s disease was a true madness, and of the melancholia or atrabilious kind, as the ancient physicians called it. And the fits returned on him at uncertain periods, as is frequently the case in this sort of disease.”—DR. MEAD.

(2) Dr. Burrows’ Commentaries on Insanity, p. 353.

nearest and dearest friends. The affections are perverted and blunted, the temper becomes querulous, passionate, and suspicious. . . . While the symptoms are thus gradually developed, the patient appears as if enduring some internal conflict, to suppress the impulse which may betray his mental aberration. He gradually entertains a conviction of suspicion concerning the nature of his malady, which he carefully conceals,—a delusion, therefore, may long be generated before it is exhibited."

The history of this portion of Saul's life is an illustration of the above: we see it in the immediate cause of the evil spirit of the Lord troubling him; in his dismay and fear at the words of the Philistine; in his envy of David, the preserver of himself and the friend of his son;—in the violent attempt to destroy him; and, because prevented, in that mad fury which suggested him to annihilate his son.

Madness, we learn moreover, was not uncommon in these times, for we find in the twenty-first chapter of this same book, that David feigned himself mad. (1) “ And he changed his behaviour before them, and feigned himself mad in their hands, and scribbled on the doors of the gate, and let his spittle fall down upon his beard. Then said Achish unto his servants, lo, you see this man is mad, wherefore then have you brought him unto me? Have I need of madmen, that ye have brought this fellow to play the madman in my presence, shall this fellow come into my house ? ”

(1) Verses 13, 14, 15.

THE
DISEASE OF NEBUCHADNEZZAR.

“ AND they shall drive thee from men, (¹)
and thy dwelling shall be with the beasts
of the field ; they shall make thee to eat
grass as oxen, and seven times shall pass
over thee, until thou know that the Most
High ruleth in the kingdom of men, and
giveth it to whomsoever he will.

“ The same hour was the thing fulfilled
upon Nebuchadnezzar, and he was driven
from men, and did eat grass as oxen, and
his body was wet with the dew of heaven,
till his hairs were grown like eagles’ feathers,
and his nails like birds’ claws.”

(1) Daniel, chap. iv. verses 32, 33.

This disorder appears to belong to that class of madness in which there is a specific hallucination, by which he fancied himself an ox, and did accordingly. Illustrations may be found in every work on insanity;—Uwins says, “the French revolution, while it overthrew one monarch created many, nay, the madhouses of France at this time were peopled with gods as well as kings. Three Louis XVI.’s were seen together disputing one another’s pretensions. There were, besides, several kings of Corsica and other countries; there were sovereigns of the world, a Jesus Christ, a Mahomet, so many deities as to render it necessary to distinguish them by the place they came from, as the god of Lyons, the god of the Gironde;” and the actions of these people accorded with their morbid fancies. They thought themselves kings or gods, and they behaved themselves according to their

own ideas, as kings and gods—Nebuchadnezzar fancied himself an ox, therefore browsed in the open fields as oxen do.

THE DISEASE OF KING JEHORAM.

THE disease under which Jehoram laboured, I have no hesitation in saying, must have been a chronic dysentery, notwithstanding “some take it to be an hernia, or rupture ; others, the falling of the anus, or a fistula in it ; others the colic, or iliac passion.”⁽¹⁾ As this infliction is the fulfilment of a threat, which includes the people of his kingdom, “Behold with a great plague will the Lord smite thy people and thy

(1) Gill.

children, and thy wives, and all thy goods,"⁽¹⁾ and which we have no reason to suppose was not carried fully into execution, it should appear that, in the first place, it was epidemic, and that after it had passed through the acute stage, chronic dysentery was super-induced, which occasionally is of long duration. "And it came to pass, that in process of time, after the end of two years, his bowels fell out by reason of his sickness, so he died of sore diseases," which event took place at the early age of forty years,—there is nothing in the text that runs in any way counter to the symptoms of dysentery, for, not unfrequently, the coluvies have the appearance of containing the substance of the bowels themselves, and it is a vulgar expression so to describe it.

(1) Chron. chap. xxxi. verses 12, 13.

EPILEPSY.

IN another place it has been observed, that under the epithet of being possessed by demons, epileptics were included, and an example to this effect is found in the ninth chapter of St. Luke. “ And, behold ! a man of the company cried out saying, Master, I beseech thee look upon my son, for he is mine only child. And lo, a spirit taketh him, and he suddenly crieth out, and it teareth him that he foameth again, and bruising him, hardly departeth from him.” That this lunatic was a demoniac, it is evident, as Mede says, from the 18th verse of the chapter, where it is said, our Saviour rebuked the *devil*, and he departed out of him, and the child was cured from

that hour. Indeed we find, that the ancients generally attributed epilepsy to demoniacal possession, and therefore esteemed it a sacred disorder, as it is often termed. (¹)

There is also this additional argument, why it should be attributed to possession, to be found in the fact, that it is generally accompanied, or at least is terminated, by mental derangement.

The history of the disease in the present

(1) "The Greek physicians gave the name of epilepsy, from ἐπιλαμβάνομαι, to the present disease, from its sudden seizure or invasion, which is its direct import; and as the violence of passion or mental emotion, to which the Roman people were accustomed to be worked up in their COMITIA, or popular assemblies, from the harangues of their demagogues, was one of the most common exciting causes, it was among the latter denominated MORBUS COMITALIS; in the popular language of our own day, "electioneering disease," in reference to the time and occasion in which it most frequently occurred; or, according to Seneca, because, whenever the disease appeared, the comitia were instantly broken up."—GOOD'S STUDY OF MEDICINE.

day, agrees intimately with the account rendered in the Sacred record now under consideration.

It is often preceded by a furious paroxysm, ending in the severe commotion of epileptic convulsion ; generally speaking it occurs suddenly ; the epileptic falls at once, under the impress of convulsion ; the muscles of the face and eyes distort the features into an expression that is truly horrible ; the hands are clenched ; the tongue is thrust forward, and a frothy saliva oozes from the mouth, sometimes tinged with blood ; during the paroxysm there are many remissions. The recovery is occasionally sudden, generally, however, it is more protracted.

Dr. Burrows gives an instance of a quiet industrious man, who suffered from a peculiar and singularly marked attack, which illustrates “ how hardly it departeth from

him." "I saw him," says he, "on the following day; his countenance then presented a most hideous and ferocious aspect; the complexion was a dusky red; his eyes starting from their sockets, and he was continually sighing deeply, or extending his jaws as if he were going to yawn. The pulsation of the temporal and radial arteries was full and laborious. He could make no reply to questions, although he attempted so to do.

"On the third day his intellects were much improved, and he was quiet. He soon quite recovered, but never had the least recollection of the acts he had committed."

THE DISEASE OF KING HEZEKIAH.

HEZEKIAH is described as sick unto death, and it is expressly told by Isaiah that he shall die, and not live. In consequence of the earnest prayer of the king, however, the prophet is desired in the name of the Lord, to say, “Behold! I will heal thee, on the third day thou shalt go up into the house of the Lord. And Isaiah said, take a lump of figs, and they took and laid it on the boil, and he recovered.”⁽¹⁾. What this disease unto death of Hezekiah may have been, I am at a loss, for my own part, to discover. Dr. Mead, however, says, and with his interpretation I must be

(1) 2 Kings, chap. xx. verses 5, 7.

content, that it was a fever, terminating in abscess. I shall quote his words in reference to this subject, as they are replete with sound sense and practical morality; “for, in cases of this kind,” (i. e. abscess succeeding fever) “those things are always proper which promote suppuration; especially digestive and resolving cataplasms; and dried figs are excellent for this intention. Thus, the Omnipotent who could remove this distemper by his word alone, chose to do it by the effect of natural remedies. And here we have an useful lesson given us in adversities, not to neglect the use of those things which the bountiful Creator has bestowed upon us, and at the same time to add our fervent prayers, that he would be graciously pleased to prosper our endeavours.”

THE DISEASE OF HEROD THE TETRARCH.

“AND immediately the angel of the Lord smote him and he was eaten up with worms.”⁽¹⁾

It must be here stated, that there are two distinct classes of parasitical animals which infest the human body. The one are included under the general term of Entozoa, and the other Phthiriasis:—to which of these two classes the disease of Herod is to be referred, appears somewhat difficult to decide.

Dr. Mead, with others, are decidedly of opinion, that it is the intestinal worm, and

(1) Acts xii. verse 23.

they are certainly borne out by the fact, that Josephus makes mention only of Herod's suffering pains, but that these were occasioned by the gnawing of worms. Josephus also states, that Herod the Great, grandfather of the individual now under consideration, died in consequence of a similar affliction.

The evidence of Scripture terminology tends to the other opinion, for whenever the external worm is alluded to, *σκωληξ*, or some of its compounds, are used. The Greek version of the text, now under consideration, runs thus :—" παραχρῆμα δὲ ἐπάταξεν αὐτὸν ἄγγελος κυρίου . . . καὶ γενόμενος σκωληκόβρωτος ⁽¹⁾, ἔξεψυξεν," while in the Septuagint we constantly find the common *external* worm simi-

(1) *Εκωληκόβρωτος*, à vermis exesus, seu crosus; ex *σκώληξ* et *βρωτός*, qu. à *βρωσκω*, comedo.

larly rendered ; thus in Exodus, (¹) “ Their manna bred worms and stank :—καὶ ἐξέζεσε σκώληκας, καὶ επωξεσθε ; and in Deuteronomy (²) when speaking of grapes, “ for the worm shall eat them,” ὅτι καταφάγεται αὐτὰ ὁ σκώληξ ; a quotation still more to the purpose, is that where Job says, (³) “ my flesh is clothed with worms and dust ; ” φύρεται δέ μου το σῶμα εν συπρια σκωλήκων ; and it is further borne out by other Greek writers, using a totally different word when they speak of the intestinal worm. Thus Herodotus says of Pheretima, the mother of Arcesilaus, that she was “ Ζωσα εὐλέων εξέζεσε,” destroyed alive by worms. Having said thus much, the obscurity of the text induces me not to prolong the discussion further.

There are many other instances of special

(1) Chap. xvi. verse 20. (2) Chap. xxviii. verse 40.

(3) Job vii. verse 5.

individual affliction mentioned in the different books of the Old and New Testaments, besides these which I have now enumerated, such as the leprosies of Miriam, Gehazi, and Uzziah ; but as the varieties of this disease have been fully illustrated, it would be tedious to enter further on them here.

There are also other cases, of which so slight mention is made, (¹) as would render any discussion on their nature futile and useless.

I have now concluded these commentaries, and it will be no unfitting observation here, to observe, that the consideration of these diseases involves a subject of much deeper interest than that to which I have devoted the preceding pages, which it

(1) The disease of King Asa is an example. Cruden states it to have been gout; to me, however, this opinion has not the slightest foundation.

would be presumption in me to enter upon,
for it is the especial duty of the learned and
pious ministers of our religion to point out,
that the inflicting of these diseases teem
with many moral lessons—that they are
proofs to us of our sins, and of the kind
feeling towards us of that Beneficent
CREATOR, whose “ways are judgment.”

THE END.

